radioprotective and chemoprotective agents. Processes or preg. compds. of the invention are also disclosed.

IN Reddy, Premkumar E.; Reddy, Ramana M. V.; Bell, Stanley C.

=> d ind 11

YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:Y

- L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN
- IC ICM A61K
- CC 1-6 (Pharmacology)

Section cross-reference(s): 8, 25

ST unsatd sulfoxide prepn proliferative disorder treatment; antitumor radioprotectant chemoprotectant unsatd sulfoxide

IT Bone, disease

(Paget's;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Fibrosis

(Peronies and Duputren's fibrosis;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Radioprotectants

(and chemoprotectants;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Antiarteriosclerotics

(antiatherosclerotics;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Neoplasm

(bone marrow;  $\alpha,\beta\text{-unsatd}.$  sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Intestine, neoplasm

(colorectal;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Antibodies and Immunoglobulins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(conjugates, with  $\alpha, \beta$ -unsatd. sulfoxides;

 $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Disease, animal

(degenerative, chronic progressive myelodegenerative disease;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Disease, animal

(ganglioneuromatosis;  $\alpha,\beta\text{-unsatd.}$  sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Disease, animal

Newborn

(hemangiomatosis in newborn;  $\alpha,\beta\text{-unsatd.}$  sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Mitosis

(mitotic phase cell cycle inhibitor;  $\alpha,\beta$ -unsatd. sulfoxides

10/574,993 for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Antibodies and Immunoglobulins RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (monoclonal, conjugates, with  $\alpha,\beta$ -unsatd. sulfoxides;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Nervous system, neoplasm (neurofibromatosis type 1;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Lung, neoplasm (non-small-cell carcinoma;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) Disease, animal IT (proliferative;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Carcinoma (pulmonary non-small-cell;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Artery, disease (restenosis;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Multiple sclerosis (secondary progressive;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Alkaloids, biological studies RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (vinca;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants) IT Antitumor agents Apoptosis Atherosclerosis Bone marrow, neoplasm Brain, neoplasm Cardiovascular agents Cirrhosis Cystic fibrosis Cytotoxic agents Drug delivery systems Drug toxicity Human Ionizing radiation Keloid Kidney, neoplasm Leukemia Lung, neoplasm Mammary gland, neoplasm Neoplasm Nervous system agents Ovary, neoplasm

Oxidizing agents

Radiotherapy Sarcoidosis

Prostate gland, neoplasm

```
Skin, neoplasm
     Testis, neoplasm
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     Macrolides
     Taxanes
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     Sulfides, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (\alpha,\beta\text{-unsatd. sulfoxides for treatment of proliferative}
        disorders and as radioprotectants and chemoprotectants)
     80449-01-0, Topoisomerase
IT
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitors; \alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and chemoprotectants)
IT
     57-22-7, Vincristine
                             64-86-8, Colchicine
                                                     64-86-8D, Colchicine, derivs.
                                33069-62-4, Paclitaxel
                                                           33419-42-0, Etoposide
     7689-03-4, Camptothecin
     65271-80-9, Mitoxantrone
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
     852283-21-7P
                     852283-22-8P
                                     852283-23-9P
                                                     852283-75-1P
IT
                                                                     852283-91-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
         (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     852283-15-9
                    852283-16-0
                                   852283-17-1
                                                  852283-18-2
                                                                 852283-19-3
     852283-20-6
                    852283-24-0
                                   852283-25-1
                                                  852283-26-2
                                                                 852283-27-3
     852283-28-4
                    852283-29-5
                                   852283-30-8
                                                  852283-31-9
                                                                 852283-32-0
     852283-33-1
                    852283-34-2
                                   852283-35-3
                                                  852283-36-4
                                                                 852283-37-5
     852283-38-6
                    852283-39-7
                                   852283-40-0
                                                  852283-41-1
                                                                 852283-42-2
                    852283-44-4
                                   852283-45-5
                                                  852283-46-6
                                                                 852283-47-7
     852283-43-3
     852283-48-8
                    852283-49-9
                                   852283-50-2
                                                  852283-51-3
                                                                 852283-52-4
                                   852283-55-7
                                                  852283-56-8
                                                                 852283-57-9
     852283-53-5
                    852283-54-6
                                                  852283-61-5
                    852283-59-1
                                   852283-60-4
                                                                 852283-62-6
     852283-58-0
     852283-63-7
                    852283-64-8
                                   852283-65-9
                                                  852283-66-0
                                                                 852283-67-1
     852283-68-2
                    852283-69-3
                                   852283-70-6
                                                  852283-71-7
                                                                 852283-72-8
     852283-73-9
                    852283-74-0
                                   852283-76-2
                                                  852283-77-3
                                                                 852283-78-4
     852283-79-5
                    852283-80-8
                                                  852283-82-0
                                                                 852283-83-1
                                   852283-81-9
     852283-84-2
                    852283-85-3
                                   852283-86-4
                                                  852283-87-5
                                                                 852283-88-6
     852283-89-7
                    852283-90-0
                                   852283-92-2
                                                  852283-93-3
                                                                 852283-94-4
                    852283-96-6
                                   852283-97-7
                                                  852283-98-8
                                                                 852283-99-9
     852283-95-5
     852284-00-5
                    852284-01-6
                                   852284-02-7
                                                  852284-03-8
                                                                 852284-04-9
```

852284-08-3

852284-13-0

852284-18-5

852284-23-2

852284-28-7

852284-33-4

852284-38-9

852284-09-4

852284-14-1

852284-19-6

852284-24-3

852284-29-8

852284-34-5

852284-39-0

852284-07-2

852284-12-9

852284-17-4

852284-22-1

852284-27-6

852284-32-3

852284-37-8

852284-05-0

852284-10-7

852284-15-2

852284-20-9

852284-25-4

852284-30-1

852284-35-6

852284-06-1

852284-11-8

852284-16-3

852284-21-0

852284-26-5

852284-31-2

852284-36-7

```
852284-40-3
                   852284-41-4
                                  852284-42-5
                                                852284-43-6
                                                               852284-44-7
     852284-45-8
                   852284-46-9
                                  852284-47-0
                                                852284-48-1
                                                               852284-49-2
                                                               852284-54-9
     852284-50-5
                   852284-51-6
                                  852284-52-7
                                                852284-53-8
                                  852284-57-2
                                                852284-58-3
                                                               852284-59-4
     852284-55-0
                   852284-56-1
                                                852284-63-0
                                                               852284-64-1
     852284-60-7
                   852284-61-8
                                  852284-62-9
                   852284-66-3
     852284-65-2
                                  852284-67-4
                                                852284-68-5
                                                               852284-69-6
     852284-70-9
                   852284-71-0
                                  852284-72-1
                                                852284-73-2
                                                               852284-74-3
     852284-75-4
                   852284-76-5
                                  852284-77-6
                                                852284-78-7
                                                               852284-79-8
     852284-80-1
                   852284-81-2
                                  852284-82-3
                                                852284-83-4
                                                               852284-84-5
     852284-85-6
                   852284-86-7
                                  852284-87-8
                                                852284-88-9
                                                               852284-89-0
     852284-90-3
                                                852284-93-6
                                                               852284-94-7
                   852284-91-4
                                  852284-92-5
                                  852284-97-0
                                                852284-98-1
                                                               852284-99-2
     852284-95-8
                   852284-96-9
                                  852285-02-0
                                                852285-03-1
                                                               852285-04-2
     852285-00-8
                   852285-01-9
     852285-05-3
                   852285-06-4
                                  852285-07-5
                                                852285-08-6
                                                               852285-09-7
     852285-10-0
                   852285-11-1
                                  852285-12-2
                                                852285-13-3
                                                               852285-14-4
     852285-15-5
                   852285-16-6
                                  852285-17-7
                                                852285-18-8
                                                               852285-19-9
     852285-20-2
                                  852285-22-4
                                                852285-23-5
                   852285-21-3
                                                               852285-24-6
     852285-25-7
                                  852285-27-9
                                                852285-28-0
                                                               852285-29-1
                   852285-26-8
     852285-30-4
                   852285-31-5
                                  852285-32-6
                                                852285-33-7
                                                               852285-34-8
     852285-35-9
                   852285-36-0
                                  852285-37-1
                                                852285-38-2
                                                               852285-39-3
     852285-40-6
                   852285-41-7
                                  852285-42-8
                                                852285-43-9
                                                               852285-44-0
     852285-45-1
                   852285-46-2
                                  852285-47-3
                                                852285-48-4
                                                               852285-49-5
     852285-50-8
                   852285-51-9
                                  852285-52-0
                                                852285-53-1
                                                               852285-54-2
     852285-55-3
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
     852285-56-4
                   852285-57-5
IT
                                 852285-58-6
                                                852285-59-7
                                                               852285-60-0
     852285-61-1
                   852285-62-2
                                  852285-63-3
                                                852285-64-4
                                                               852285-65-5
     852285-66-6
                   852285-67-7
                                  852285-68-8
                                                852285-69-9
                                                               852285-70-2
                                  852285-73-5
     852285-71-3
                   852285-72-4
                                                852285-74-6
                                                               852285-75-7
     852285-76-8
                   852285-77-9
                                  852285-80-4
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     68-11-1, Mercaptoacetic acid, reactions
                                                104-83-6
                                                            619-66-9
                                                                       824-94-2
                6378-19-4
                             529502-39-4
     830-79-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     28203-55-6P
                  125174-87-0P 852285-78-0P
                                                 852285-79-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (\alpha, \beta-unsatd. sulfoxides for treatment of proliferative
        disorders and as radioprotectants and chemoprotectants)
=> d que 12
L2
              1 SEA FILE=WPIX ABB=ON PLU=ON US2006-574993/APPS
=> d iall code 12
YOU HAVE REQUESTED DATA FROM FILE 'WPIX' - CONTINUE? (Y) /N:y
```

L2

ACCESSION NUMBER: 2005-405099 [41] WPIX

DOC. NO. CPI: C2005-124931 [41]

TITLE: New alpha, beta-unsaturated sulfoxide compounds used for treating proliferative disorders e.g. hemangiomatosis in

newborn, secondary progressive multiple sclerosis, neurofibromatosis, ganglioneuromatosis and cancer

DERWENT CLASS: B05

INVENTOR: BELL S; BELL S C; REDDY P; REDDY P E; REDDY R; REDDY R M

V; REDDY E P; REDDY M V R

PATENT ASSIGNEE: (UTEM-C) UNIV TEMPLE; (ONCO-N) ONCONOVA THERAPEUTICS INC;

(BELL-I) BELL S C; (REDD-I) REDDY E P; (REDD-I) REDDY M V

R

COUNTRY COUNT: 107

#### PATENT INFORMATION:

PAT	TENT NO	KINI	DATE	WEEK	LA	PG	MAIN	IPC	
WO	2005046599	A2	20050526	(200541)*	EN	120[0]			
ΕP	1689706	A2	20060816	(200654)	EN				
AU	2004289281	A1	20050526	(200674)	EN				
US	20060280746	A1	20061214	(200701)	EN				

#### APPLICATION DETAILS:

PATENT NO . KIND	APPLICATION DATE
WO 2005046599 A2	WO 2004-US37293 20041108
AU 2004289281 A1	AU 2004-289281 20041108
EP 1689706 A2	EP 2004-816944 20041108
EP 1689706 A2	WO 2004-US37293 20041108
US 20060280746 Al Provisional	US 2003-520523P 20031114
US 20060280746 A1	WO 2004-US37293 20041108
US 20060280746 A1	US 2006-574993 20060406

#### FILING DETAILS:

PAT	ENT	NO	KIND			PAT	ENT	NO	
ĒΡ	1689	706	A2	Based	on	WO	2005	046599	Α
ΑU	2004	289281	A1	Based	on	WO	2005	046599	Α

PRIORITY APPLN. INFO: US 2003-520523P 20031114

US 2006-574993 20060406

INT. PATENT CLASSIF .:

IPC ORIGINAL: A61K0031-095 [I,C]; A61K0031-10 [I,A]; A61K0031-12 [I,A]; A61K0031-12 [I,C];

A61K0031-12 [1,C]; A61K0031-34 [1,A]; A61K0031-34 [1,C]; A61K0031-455 [1,A]; A61K0039-395 [1,C]; C07C0317-00 [1,C]; C07C0317-10

[I,A]; C07C0321-00 [I,C]; C07C0321-28 [I,A]

IPC RECLASSIF.: A61K [I,S]; A61K0031-095 [I,C]; A61K0031-10 [I,A];

C07C0317-00 [I,C]; C07C0317-10 [I,A]

BASIC ABSTRACT:

WO 2005046599 A2 UPAB: 20051222

NOVELTY - alpha, beta-unsaturated sulfoxide compounds (I), are new.

DETAILED DESCRIPTION - alpha, beta-unsaturated sulfoxide compounds of formula (I) and their salts are new.

A, B1 = aryl or heteroaryl (both optionally substituted); n = 0 or 1, and

R1 = H, 1-8C hydrocarbyl, CN, CO2(1-6C alkyl) or halo(1-6C alkyl),

provided that when A and B1 are both phenyl, at least one of A or B1 is substituted.

The conformation of the substituents on the carbon-carbon double bond is either E- or Z- conformation. The conformation of the substituents on the sulfoxide sulfur atom is R- and/or S- conformation. The asterisk indicates that, when Rl is not H, the conformation of the substituents on the designated C-atom is R- and/or S- conformation. INDEPENDENT CLAIMS are also included for:

- (1) a conjugate (I-1) of formula (I)-L-Ab;
- (2) a composition comprising (I-1);
- (3) reducing or eliminating the effects of ionizing radiation on normal cells in an individual who has incurred or is at risk of incurring exposure to ionizing radiation which comprises administering at least one radioprotective compound (I) prior to or after exposure to ionizing radiation;
- (4) treating a proliferative disorder which comprises administering (I) and therapeutic ionizing radiation;
- (5) reducing the number of malignant cells in bone marrow which comprises removing a portion of bone marrow, administering at least one radioprotective compound (I), and irradiating the bone marrow with ionizing radiation;
- (6) protecting from cytotoxic side effects of the administration of a mitotic phase cell cycle inhibitor or a topoisomerase inhibitor which comprises administering, in advance of administration of the inhibitor, at least one cytoprotective compound (I), where the mitotic phase cell cycle inhibitor or topoisomerase inhibitor is not (I);
  - (7) preparation of (I);
- (8) preparation of alpha, beta-unsaturated sulfone compounds of formula (V);
  - (9) acid intermediate compounds of formula (II);
  - (10) alpha, beta-unsaturated sulfanyl compounds of formula (IV), and
  - (11) an isolated optical isomer of (I).

Ab = an antibody, and

 ${\tt L}={\tt a}$  single covalent bond or a linking group covalently linking the (I) to the antibody.

ACTIVITY - Cytostatic; Neuroprotective; Vulnerary; Osteopathic; Antiinflammatory; Hepatotropic; Antiarteriosclerotic; Vasotropic.

In a test using the prostate tumor cell line DU-145, results showed that (E)-2.4, 6-trimethoxystyryl-4-methoxy-3-aminobenzylsulfoxide (Ia) exhibited a GI50 value of 10-100 nM.

MECHANISM OF ACTION - None given.

USE - Used for inducing apoptosis of tumor cells and to treat a proliferative disorder, particularly hemangiomatosis in newborn, secondary progressive multiple sclerosis, chronic progressive myelodegenerative disease, neurofibromatosis; ganglioneuromatosis, keloid formation, Paget's Disease of the bone, fibrocystic disease, sarcoidosis, Peronies and Duputren's fibrosis, cirrhosis, atherosclerosis and vascular restenosis, and cancer such as cancer of ovarian, breast, prostate, testicular, lung, renal, colorectal, skin, or brain or leukemia (claimed).

ADVANTAGE - (I) protects an individual from cytotoxic side effects of the administration of a mitotic phase cell cycle inhibitor or a topoisomerase inhibitor. (I) reduces or eliminates the effects of ionizing radiation on normal cells (all claimed). MANUAL CODE: CPI: B04-G05; B04-G21; B04-G22; B07-H; B10-A09B; B10-A10;

B14-C03; B14-F01G; B14-F07; B14-H01; B14-H03; B14-J01; B14-M01; B14-N01; B14-N12; B14-N17B; B14-S01

AN 2005-405099 [41] WPIX

DC B05

IPCI A61K0031-095 [I,C]; A61K0031-10 [I,A]; A61K0031-12 [I,A]; A61K0031-12
[I,C]; A61K0031-34 [I,A]; A61K0031-34 [I,C]; A61K0031-455 [I,A];
A61K0031-455 [I,C]; A61K0039-395 [I,A]; A61K0039-395 [I,C]; C07C0317-00
[I,C]; C07C0317-10 [I,A]; C07C0321-00 [I,C]; C07C0321-28 [I,A]

```
IPCR A61K [I,S]; A61K0031-095 [I,C]; A61K0031-10 [I,A]; C07C0317-00 [I,C];
     C07C0317-10 [I,A]
     CPI: B04-G05; B04-G21; B04-G22; B07-H; B10-A09B; B10-A10; B14-C03;
MC
           B14-F01G; B14-F07; B14-H01; B14-H03; B14-J01; B14-M01; B14-N01;
           B14-N12; B14-N17B; B14-S01
           20051222
CMC
     UPB
     M1 *98*
              C216 G015 G017 G100 H5 H543 H6 H601 H608 H684 H7 H721 H8 J0 J012
               J2 J271 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321
               M322 M332 M342 M344 M349 M362 M373 M391 M392 M414 M423 M431 M510
               M520 M532 M540 M782 M905 M904
               DCN: RAI2CY-K RAI2CY-M RAI2CY-Q
               DCR: 1086022-K 1086022-M 1086022-Q
     M2 *01*
               C216 G013 G020 G111 G221 H6 H601 H641 H7 H721 K0 K4 K442 M280
               M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
               M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
               P646 P714 P721 P942 M905 M904
               DCN: RAI110-N RAI110-P RAI110-T
               DCR: 1084222-N 1084222-P 1084222-T
     M2 *02*
               C216 G013 G020 G111 G221 H6 H602 H641 H7 H721 K0 K4 K442 M280
               M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
               M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
               P646 P714 P721 P942 M905 M904
               DCN: RAI11Q-N RAI11Q-P RAI11Q-T
               DCR: 1084224-N 1084224-P 1084224-T
     M2 *03*
               C216 G013 G020 G111 G221 H6 H603 H641 H7 H721 K0 K4 K442 M280
               M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
               M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
               P646 P714 P721 P942 M905 M904
               DCN: RAIllR-N RAIllR-P RAIllR-T
               DCR: 1084225-N 1084225-P 1084225-T
     M2 *04*
               C216 G011 G020 G111 G221 H3 H341 H7 H721 K0 K4 K442 M280 M311
               M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720
               N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
               P714 P721 P942 M905 M904
               DCN: RAI11S-N RAI11S-P RAI11S-T
               DCR: 1084226-N 1084226-P 1084226-T
     M2 *05*
               C216 G012 G020 G111 G221 H3 H341 H7 H721 K0 K4 K442 M280 M311
               M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720
               N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
               P714 P721 P942 M905 M904
               DCN: RAI11T-N RAI11T-P RAI11T-T
               DCR: 1084227-N 1084227-P 1084227-T
     M2 *06*
               C216 G013 G020 G111 G221 H3 H341 H7 H721 K0 K4 K442 M280 M311
               M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720
               N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
               P714 P721 P942 M905 M904
               DCN: RAIllU-N RAIllU-P RAIllU-T
               DCR: 1084228-N 1084228-P 1084228-T
               C216 G015 G017 G100 H1 H100 H141 H5 H543 H8 K0 K4 K442 M210 M211
     M2 *07*
               M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
               M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
               P528 P633 P646 P714 P721 P942 M905 M904
               DCN: RAI127-N RAI127-P RAI127-T
               DCR: 1084243-N 1084243-P 1084243-T
     M2 *08*
               C216 G015 G017 G100 H4 H401 H441 H5 H543 H8 K0 K4 K442 M210 M211
               M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
               M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
               P528 P633 P646 P714 P721 P942 M905 M904
               DCN: RAI128-N RAI128-P RAI128-T
               DCR: 1084244-N 1084244-P 1084244-T
```

```
=> d que 11
```

L1 1 SEA FILE=HCAPLUS ABB=ON PLU=ON US2006-574993/APPS

=> d ibib ed ab in 11
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L1 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2005:451126 HCAPLUS Full-text

DOCUMENT NUMBER:

143:1247

TITLE:

 $\alpha,\beta$ -Unsaturated sulfoxides for treating

proliferative disorders and as radioprotective and

chemoprotective agents

INVENTOR(S):

Reddy, Premkumar E.; Reddy, Ramana M. V.; Bell,

Stanley C.

PATENT ASSIGNEE(S):

Temple University-of the Commonwealth System of Higher

Education, USA; Onconova Therapeutics Inc.

SOURCE:

PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.			KIND DATE			APPLICATION NO.						DATE					
·	WO 2005046599 WO 2005046599				WO 2004-US37293				20041108									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	İS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
			SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
			NE,	SN,	TD,	TG												
	AU	2004	2892	81		A1		2005	0526		AU 2	004-	2892	31		2	0041	108
	CA	2546	495			<b>A</b> 1		2005	0526		CA 2	004-	2546	495		2	0041	108
	EΡ	1689	706			A2		2006	0816		EP 2	004-	8169	4 4		2	0041	108
		R:	ΑT,	BE,	CH,	LI,	CY,	BG,	CZ									
	US	2006	2807	46		A1		2006	1214		US 2	006-	5749	93		2	0060	406 <
PRIC	RIT	Y APP	LN.	INFO	.:						US 2	003-	5205	23P		P 2	0031	114
										•	WO 2	004-	US37:	293	1	₩ 2	0041	108
OMITE	ים מי	STOCE	/C) .			CACI	ממח	m 1/	2.12	17.	MADD	70 m 1	12.1	247				

OTHER SOURCE(S):

CASREACT 143:1247; MARPAT 143:1247

ED Entered STN: 27 May 2005

AB  $\alpha\beta$ -Unsatd. sulfoxides Ar1[CH(R1)]nS(O)CH=CHAr2 [Ar1, Ar2 = (un)substituted (hetero)aryl (when Ar1 and Ar2 are both Ph, at least one of Ar1 and Ar2 is substituted); n = o, 1; R1 = H, C1-8 hydrocarbyl, CN, etc.; conformation of substituents on carbon-carbon double bond is E or Z; conformation of substituents on sulfoxide S atom is R-, S- or any mixture of R- and S-; when R1 other than H, conformation of substituents on carbon atom to which R1 is attached is R-, S- or any mixture of R- and S-] are disclosed which are useful as antiproliferative agents including e.g. anticancer agents and as

```
C216 G015 G017 G100 H3 H341 H5 H543 H8 K0 K4 K442 M210 M211 M272
M2 *09*
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI129-N RAI129-P RAI129-T
          DCR: 1084245-N 1084245-P 1084245-T
M2 *10*
          C216 C316 G015 G017 G100 H5 H543 H7 H721 H8 J0 J011 J1 J171 K0
          K3 K353 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332
          M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI12A-N RAI12A-P RAI12A-T
          DCR: 1084246-N 1084246-P 1084246-T
M2 *11*
          C216 G015 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 L2 L250 M210
          M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI12B-N RAI12B-P RAI12B-T
          DCR: 1084247-N 1084247-P 1084247-T
M2 *12*
          C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J012 J1 J171 J3 J341
          KO K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342
          M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241
          N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721
          P942 M905 M904
          DCN: RAI12C-N RAI12C-P RAI12C-T
          DCR: 1084248-N 1084248-P 1084248-T
          C216 G015 G017 G100 H1 H102 H141 H5 H543 H7 H721 H8 J0 J011 J1
          J171 KO K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332
          M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI12D-N RAI12D-P RAI12D-T
          DCR: 1084249-N 1084249-P 1084249-T
M2 *14*
          C216 G015 G016 G017 G100 H3 H342 H5 H543 H7 H721 H8 J0 J011 J3
          J331 K0 K4 K442 M1 M121 M136 M210 M211 M272 M283 M311 M312 M321
          M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241
          N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721
          P942 M905 M904
          DCN: RAI12E-N RAI12E-P RAI12E-T
          DCR: 1084250-N 1084250-P 1084250-T
M2 *15*
          C216 G015 G016 G017 G100 H1 H100 H102 H142 H5 H543 H7 H721 H8 J0
          J011 J3 J331 K0 K4 K442 M1 M121 M143 M210 M211 M272 M283 M311
          M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI12F-N RAI12F-P RAI12F-T
          DCR: 1084251-N 1084251-P 1084251-T
M2 *16*
          C216 G015 G017 G100 H5 H543 H6 H602 H681 H7 H721 H8 J0 J011 J3
          J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332
          M342 M349 M362 M373 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI12G-N RAI12G-P RAI12G-T
          DCR: 1084252-N 1084252-P 1084252-T
M2 *17*
          C216 F011 F014 F553 G015 G017 G100 H1 H182 H2 H202 H5 H543 H7
          H721 H8 J0 J011 J3 J341 K0 K4 K442 M210 M211 M272 M273 M281 M283
          M311 M312 M321 M322 M332 M342 M349 M373 M381 M391 M392 M413 M510
          M521 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI12H-N RAI12H-P RAI12H-T
```

```
DCR: 1084253-N 1084253-P 1084253-T
M2 *18*
          C216 G010 G015 G017 G100 H5 H543 H7 H721 H8 J0 J011 J3 J331 K0
```

K4 K442 M1 M121 M136 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2C5-N RAI2C5-P RAI2C5-T

DCR: 1085992-N 1085992-P 1085992-T

M2 \*19\* C216 G013 G015 G017 G100 H3 H341 H5 H543 H7 H721 H8 J0 J011 J3 J331 K0 K4 K442 M1 M121 M136 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2C6-N RAI2C6-P RAI2C6-T

DCR: 1085993-N 1085993-P 1085993-T

M2 \*20\* C216 G013 G015 G017 G100 H1 H100 H141 H5 H543 H7 H721 H8 J0 J011 J3 J331 K0 K4 K442 M1 M121 M136 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2C7-N RAI2C7-P RAI2C7-T

DCR: 1085994-N 1085994-P 1085994-T

M2 \*21\* C216 G013 G015 G017 G100 H3 H341 H5 H543 H7 H721 H8 K0 K4 K442 L3 L355 M1 M121 M134 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2C8-N RAI2C8-P RAI2C8-T

DCR: 1085995-N 1085995-P 1085995-T

C216 G015 G017 G100 H1 H102 H141 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272 M273 M281 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2C9-N RAI2C9-P RAI2C9-T DCR: 1085996-N 1085996-P 1085996-T

C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J011 J3 J341 K0 K4 M2 \*23\* K442 M210 M211 M262 M272 M281 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2CA-N RAI2CA-P RAI2CA-T

DCR: 1085997-N 1085997-P 1085997-T

M2 \*24\* C216 C316 G015 G017 G019 G100 H3 H342 H5 H543 H7 H721 H8 K0 K3 K353 K4 K442 M1 M121 M147 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CB-N RAI2CB-P RAI2CB-T

DCR: 1085998-N 1085998-P 1085998-T

M2 \*25\* C216 C316 G015 G017 G019 G100 H1 H101 H142 H5 H543 H7 H721 H8 K0 K3 K353 K4 K442 M1 M121 M147 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CC-N RAI2CC-P RAI2CC-T

DCR: 1085999-N 1085999-P 1085999-T

M2 \*26\* C216 G015 G017 G100 H1 H103 H181 H5 H543 H7 H721 H8 J0 J011 J3 J341 K0 K4 K442 M210 M211 M272 M273 M282 M283 M311 M312 M321 M322 M332 M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528

```
P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CD-N RAI2CD-P RAI2CD-T
          DCR: 1086000-N 1086000-P 1086000-T
          C216 G015 G017 G100 H1 H102 H141 H5 H543 H7 H721 H8 J0 J011 J1
          J171 KO K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M331
          M332 M340 M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CE-N RAI2CE-P RAI2CE-T
          DCR: 1086001-N 1086001-P 1086001-T
M2 *28*
          C216 F011 F014 F553 G013 G015 G017 G100 H1 H141 H181 H2 H202 H5
          H543 H7 H721 H8 J0 J011 J3 J331 K0 K4 K442 M1 M121 M136 M210
          M211 M272 M273 M281 M283 M311 M312 M321 M332 M342 M373 M392 M413
          M510 M521 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CF-N RAI2CF-P RAI2CF-T
          DCR: 1086002-N 1086002-P 1086002-T
          C216 G015 G017 G100 H4 H401 H481 H5 H543 H7 H721 H8 J0 J011 J3
M2 *29*
          J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332
          M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI2CG-N RAI2CG-P RAI2CG-T
          DCR: 1086003-N 1086003-P 1086003-T
M2 *30*
          C216 F012 F431 G015 G017 G100 H5 H543 H7 H721 H8 J0 J011 J3 J341
          KO K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342
          M372 M373 M391 M392 M413 M510 M521 M532 M540 M710 M720 N211 N241
          N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721
          P942 M905 M904
          DCN: RAI2CH-N RAI2CH-P RAI2CH-T
          DCR: 1086004-N 1086004-P 1086004-T
M2 *31*
          C216 G015 G017 G100 H4 H401 H481 H5 H543 H7 H721 H8 J0 J011 J3
          J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M331
          M332 M340 M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CJ-N RAI2CJ-P RAI2CJ-T
          DCR: 1086006-N 1086006-P 1086006-T
M2 *32*
          C216 G015 G017 G100 H4 H401 H481 H5 H543 H7 H721 H8 J0 J011 J3
          J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M313 M321 M331
          M332 M340 M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904.
          DCN: RAI2CK-N RAI2CK-P RAI2CK-T
          DCR: 1086007-N 1086007-P 1086007-T
M2 *33*
          C216 G015 G017 G100 H5 H543 H6 H685 H7 H721 H8 J0 J011 J3 J341
          KO K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342
          M344 M349 M362 M373 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI2CL-N RAI2CL-P RAI2CL-T
          DCR: 1086008-N 1086008-P 1086008-T
M2 *34*
          C216 C316 G015 G017 G100 H5 H543 H6 H685 H7 H721 H8 K0 K3 K353
          K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342 M344
          M362 M373 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241
          N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721
```

M2 \*35\* C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J012 J1 J171 J3 J341

P942 M905 M904

DCN: RAI2CM-N RAI2CM-P RAI2CM-T DCR: 1086009-N 1086009-P 1086009-T

10/574,993 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342 M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CN-N RAI2CN-P RAI2CN-T DCR: 1086011-N 1086011-P 1086011-T M2 \*36\* C017 C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J011 J3 J341 K0 K4 K442 L5 L512 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342 M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CO-N RAI2CO-P RAI2CO-T DCR: 1086012-N 1086012-P 1086012-T M2 \*37\* C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J013 J1 J171 J2 J271 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M322 M332 M342 M349 M373 M381 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CP-N RAI2CP-P RAI2CP-T DCR: 1086013-N 1086013-P 1086013-T M2 \*38\* C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J012 J1 J171 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M313 M321 M332 M342 M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CO-N RAI2CO-P RAI2CO-T DCR: 1086014-N 1086014-P 1086014-T M2 \*39\* C216 G015 G017 G100 H1 H102 H141 H5 H543 H7 H721 H8 J0 J011 J1 J171 K0 K4 K442 M210 M211 M272 M283 M311 M312 M313 M321 M332 M342 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CR-N RAI2CR-P RAI2CR-T DCR: 1086015-N 1086015-P 1086015-T M2 \*40\*M417 M423 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 DCN: RA00C8-N RA00C8-P RA00C8-T DCR: 184587-N 184587-P 184587-T M2 \*41\* C216 G015 G017 G100 H1 H102 H141 H5 H543 H7 H721 H8 J0 J011 J1 J171 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CS-N RAI2CS-P RAI2CS-T DCR: 1086016-N 1086016-P 1086016-T M2 \*42\* C216 G015 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 L4 L462 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517

P523 P528 P633 P646 P714 P721 P942 M905 M904 DCN: RAI2CT-N RAI2CT-P RAI2CT-T DCR: 1086017-N 1086017-P 1086017-T

M2 \*43\* C216 C316 G013 G015 G017 G100 H5 H543 H7 H721 H8 K0 K3 K353 K4 K442 M1 M121 M147 M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M533 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904

DCN: RAI2CU-N RAI2CU-P RAI2CU-T

DCR: 1086018-N 1086018-P 1086018-T

M2 \*44\* C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J012 J2 J271 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332 M342

M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211 N241

```
N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714 P721
          P942 M905 M904
          DCN: RAI2CV-N RAI2CV-P RAI2CV-T
          DCR: 1086019-N 1086019-P 1086019-T
M2 *45*
          C216 G015 G017 G100 H5 H543 H7 H721 H8 J0 J012 J2 J271 J3 J341
          KO K4 K442 M210 M211 M212 M272 M283 M311 M312 M321 M322 M332
          M342 M373 M382 M391 M392 M414 M510 M520 M532 M540 M710 M720 N211
          N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646 P714
          P721 P942 M905 M904
          DCN: RAI2CW-N RAI2CW-P RAI2CW-T
          DCR: 1086020-N 1086020-P 1086020-T
M2 *46*
          C216 G015 G017 G100 H5 H543 H6 H601 H608 H684 H685 H7 H721 H8 J0
          J011 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322
          M332 M342 M344 M349 M362 M373 M391 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CX-N RAI2CX-P RAI2CX-T
          DCR: 1086021-N 1086021-P 1086021-T
M2 *47*
          C216 G015 G017 G100 H5 H543 H6 H601 H609 H684 H689 H7 H721 H8 J0
          J012 J1 J171 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312
          M321 M322 M332 M342 M344 M349 M362 M373 M391 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2CZ-N RAI2CZ-P RAI2CZ-T
          DCR: 1086023-N 1086023-P 1086023-T
M2 *48*
          C216 G015 G017 G100 H1 H100 H181 H5 H543 H7 H721 H8 J0 J011 J3
          J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321 M322 M332
          M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI2D0-N RAI2D0-P RAI2D0-T
          DCR: 1086024-N 1086024-P 1086024-T
M2 *49*
          C216 G015 G017 G100 H5 H543 H6 H601 H608 H684 H7 H721 H8 J0 J012
          J1 J171 J3 J341 K0 K4 K442 M210 M211 M272 M283 M311 M312 M321
          M322 M332 M342 M344 M349 M362 M373 M391 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D1-N RAI2D1-P RAI2D1-T
          DCR: 1086025-N 1086025-P 1086025-T
          C216 G015 G017 G100 H1 H103 H181 H5 H543 H6 H601 H608 H684 H7
M2 *50*
          H721 H8 J0 J011 J3 J341 K0 K4 K442 M210 M211 M272 M273 M282 M283
          M311 M312 M321 M322 M332 M342 M344 M349 M362 M373 M391 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D2-N RAI2D2-P RAI2D2-T
          DCR: 1086026-N 1086026-P 1086026-T
M2 *51*
          C216 G013 G019 G100 H6 H601 H641 H7 H721 J0 J011 J1 J131 K0 K4
          K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D3-N RAI2D3-P RAI2D3-T
          DCR: 1086027-N 1086027-P 1086027-T
M2 *52*
          C216 G013 G019 G100 H6 H604 H641 H7 H721 J0 J011 J1 J131 K0 K4
          K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D4-N RAI2D4-P RAI2D4-T
          DCR: 1086028-N 1086028-P 1086028-T
M2 *53* C216 G013 G019 G100 H6 H602 H641 H7 H721 J0 J011 J1 J131 K0 K4
```

```
K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D5-N RAI2D5-P RAI2D5-T
          DCR: 1086029-N 1086029-P 1086029-T
          C216 G013 G015 G100 H1 H103 H181 H6 H601 H602 H642 H7 H721 J5
M2 *54*
          J581 KO K4 K442 M210 M211 M273 M282 M311 M312 M321 M322 M332
         M342 M349 M373 M381 M391 M392 M414 M510 M520 M532 M540 M710 M720
          N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633 P646
          P714 P721 P942 M905 M904
          DCN: RAI2D6-N RAI2D6-P RAI2D6-T
          DCR: 1086030-N 1086030-P 1086030-T
M2 *55*
          C216 G013 G015 G100 H6 H601 H603 H608 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D7-N RAI2D7-P RAI2D7-T
          DCR: 1086031-N 1086031-P 1086031-T
M2 *56*
          C216 G013 G015 G100 H1 H100 H141 H6 H601 H602 H642 H7 H721 K0 K4
          K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2D8-N RAI2D8-P RAI2D8-T
          DCR: 1086032-N 1086032-P 1086032-T
M2 *57*
          C216 G013 G018 G100 H6 H601 H609 H643 H7 H721 K0 K4 K442 M280
          M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
          M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
         P646 P714 P721 P942 M905 M904
          DCN: RAI2D9-N RAI2D9-P RAI2D9-T
          DCR: 1086033-N 1086033-P 1086033-T
M2 *58*
          C216 G013 G018 G100 H6 H601 H602 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DA-N RAI2DA-P RAI2DA-T
          DCR: 1086034-N 1086034-P 1086034-T
M2 *59*
          C216 G013 G018 G100 H6 H601 H603 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DB-N RAI2DB-P RAI2DB-T
          DCR: 1086035-N 1086035-P 1086035-T
M2 * 60*
          C216 G013 G018 G100 H6 H601 H609 H643 H7 H721 K0 K4 K442 M280
          M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
          M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
          P646 P714 P721 P942 M905 M904
          DCN: RAI2DC-N RAI2DC-P RAI2DC-T
          DCR: 1086036-N 1086036-P 1086036-T
M2 *61*
          C216 G013 G018 G100 H6 H601 H602 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DD-N RAI2DD-P RAI2DD-T
          DCR: 1086037-N 1086037-P 1086037-T
M2 *62*
          C216 G013 G018 G100 H6 H601 H603 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DE-N RAI2DE-P RAI2DE-T
          DCR: 1086038-N 1086038-P 1086038-T
```

```
M2 *63*
          C216 G015 G018 G100 H6 H601 H602 H608 H609 H643 H7 H721 K0 K4
          K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532
          M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523
          P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DF-N RAI2DF-P RAI2DF-T
          DCR: 1086039-N 1086039-P 1086039-T
M2 *64*
          C216 G013 G018 G100 H6 H601 H604 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DG-N RAI2DG-P RAI2DG-T
          DCR: 1086040-N 1086040-P 1086040-T
M2 *65*
          C216 G013 G017 G100 H3 H342 H4 H401 H441 H6 H601 H641 H7 H721 H8
          KO K4 K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DH-N RAI2DH-P RAI2DH-T
          DCR: 1086041-N 1086041-P 1086041-T
M2 *66*
          C216 G013 G017 G100 H3 H342 H4 H401 H441 H6 H603 H641 H7 H721 H8
          KO K4 K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DI-N RAI2DI-P RAI2DI-T
          DCR: 1086042-N 1086042-P 1086042-T
M2 *67*
          C216 G013 G017 G100 H3 H342 H4 H401 H441 H6 H602 H641 H7 H721 H8
          K0 K4 K442 M280 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DJ-N RAI2DJ-P RAI2DJ-T
          DCR: 1086043-N 1086043-P 1086043-T
M2 *68*
          C216 G015 G017 G100 H3 H342 H4 H401 H441 H6 H602 H608 H642 H7
          H721 H8 K0 K4 K442 M280 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DK-N RAI2DK-P RAI2DK-T
          DCR: 1086044-N 1086044-P 1086044-T
M2 *69*
          C216 G013 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DL-N RAI2DL-P RAI2DL-T
          DCR: 1086045-N 1086045-P 1086045-T
M2 *70*
          C216 G013 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M240
          M272 M281 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DM-N RAI2DM-P RAI2DM-T
          DCR: 1086046-N 1086046-P 1086046-T
M2 *71*
          C216 G013 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DN-N RAI2DN-P RAI2DN-T
          DCR: 1086047-N 1086047-P 1086047-T
M2 *72*
          C216 G017 G019 G100 H3 H341 H5 H543 H7 H721 H8 K0 K4 K442 M210
          M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DO-N RAI2DO-P RAI2DO-T
          DCR: 1086048-N 1086048-P 1086048-T
```

```
M2 *73*
          C216 G017 G019 G100 H3 H341 H5 H543 H7 H721 H8 K0 K4 K442 M210
          M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DP-N RAI2DP-P RAI2DP-T
          DCR: 1086049-N 1086049-P 1086049-T
M2 *74*
          C216 G017 G019 G100 H3 H341 H5 H543 H7 H721 H8 K0 K4 K442 M210
          M211 M240 M272 M281 M283 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DQ-N RAI2DQ-P RAI2DQ-T
          DCR: 1086050-N 1086050-P 1086050-T
M2 *75*
          C216 G013 G017 G100 H6 H601 H609 H643 H7 H721 K0 K4 K442 M280
          M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540 M710
          M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528 P633
          P646 P714 P721 P942 M905 M904
          DCN: RAI2DR-N RAI2DR-P RAI2DR-T
          DCR: 1086051-N 1086051-P 1086051-T
M2 *76*
          C216 G013 G017 G100 H6 H601 H602 H609 H643 H7 H721 K0 K4 K442
          M280 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DS-N RAI2DS-P RAI2DS-T
          DCR: 1086052-N 1086052-P 1086052-T
M2 *77*
          C216 G013 G017 G100 H4 H401 H441 H5 H543 H7 H721 H8 K0 K4 K442
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DT-N RAI2DT-P RAI2DT-T
          DCR: 1086053-N 1086053-P 1086053-T
M2 *78*
          C216 G013 G018 G100 H5 H541 H6 H601 H609 H643 H7 H721 H8 K0 K4
          K442 M210 M211 M272 M281 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DU-N RAI2DU-P RAI2DU-T
          DCR: 1086054-N 1086054-P 1086054-T
M2 *79*
          C216 G013 G017 G100 H5 H541 H6 H601 H609 H643 H7 H721 H8 K0 K4
          K442 M210 M211 M272 M281 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DV-N RAI2DV-P RAI2DV-T
          DCR: 1086055-N 1086055-P 1086055-T
          C216 G013 G017 G100 H3 H341 H4 H401 H441 H5 H542 H7 H721 H8 K0
M2 *80*
          K4 K442 M210 M211 M272 M282 M311 M312 M321 M332 M342 M373 M392
          M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513
          P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DX-N RAI2DX-P RAI2DX-T
          DCR: 1086057-N 1086057-P 1086057-T
          C216 G013 G017 G100 H3 H341 H5 H543 H7 H721 H8 K0 K4 K442 M210
M2 *81*
          M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DY-N RAI2DY-P RAI2DY-T
          DCR: 1086058-N 1086058-P 1086058-T
M2 *82*
          C216 G013 G017 G100 H5 H543 H6 H604 H641 H7 H721 H8 K0 K4 K442
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2DZ-N RAI2DZ-P RAI2DZ-T
          DCR: 1086059-N 1086059-P 1086059-T
```

```
C216 G013 G017 G100 H5 H543 H6 H601 H641 H7 H721 H8 K0 K4 K442
M2 *83*
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E0-N RAI2E0-P RAI2E0-T
          DCR: 1086060-N 1086060-P 1086060-T
          C216 G013 G017 G100 H4 H401 H441 H5 H543 H7 H721 H8 K0 K4 K442
M2 *84*
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E1-N RAI2E1-P RAI2E1-T
          DCR: 1086061-N 1086061-P 1086061-T
M2 *85*
          C216 G013 G017 G100 H5 H541 H7 H721 H8 K0 K4 K442 M210 M211 M240
          M272 M281 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520
          M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517
          P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E2-N RAI2E2-P RAI2E2-T
          DCR: 1086062-N 1086062-P 1086062-T
          C216 G013 G017 G100 H5 H543 H6 H602 H641 H7 H721 H8 K0 K4 K442
M2 *86*
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E3-N RAI2E3-P RAI2E3-T
          DCR: 1086063-N 1086063-P 1086063-T
M2 *87*
          C216 G013 G017 G100 H5 H542 H6 H601 H602 H642 H7 H721 H8 K0 K4
          K442 M210 M211 M272 M282 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E4-N RAI2E4-P RAI2E4-T
          DCR: 1086064-N 1086064-P 1086064-T
         C216 G013 G017 G100 H4 H401 H441 H5 H542 H6 H602 H641 H7 H721 H8
          KO K4 K442 M210 M211 M272 M282 M311 M312 M321 M332 M342 M373
          M392 M414 M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512
          N513 P420 P446 P517 P523 P528 P633 P646 P714 P721 P942 M905
          DCN: RAI2E5-N RAI2E5-P RAI2E5-T
          DCR: 1086065-N 1086065-P 1086065-T
M2 *89*
          C216 G013 G017 G100 H5 H543 H6 H603 H641 H7 H721 H8 K0 K4 K442
          M210 M211 M272 M283 M311 M312 M321 M332 M342 M373 M392 M414 M510
          M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E6-N RAI2E6-P RAI2E6-T
          DCR: 1086066-N 1086066-P 1086066-T
          C216 G013 G017 G100 H5 H542 H6 H601 H603 H642 H7 H721 H8 K0 K4
M2 *90*
          K442 M210 M211 M272 M282 M311 M312 M321 M332 M342 M373 M392 M414
          M510 M520 M532 M540 M710 M720 N211 N241 N243 N312 N512 N513 P420
          P446 P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E7-N RAI2E7-P RAI2E7-T
          DCR: 1086067-N 1086067-P 1086067-T
          C216 G014 G017 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272
M2 *91*
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E8-N RAI2E8-P RAI2E8-T
          DCR: 1086068-N 1086068-P 1086068-T
M2 *92*
          C216 G017 G019 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2E9-N RAI2E9-P RAI2E9-T
```

```
DCR: 1086069-N 1086069-P 1086069-T
M2 *93*
          C216 G017 G019 G100 H5 H543 H7 H721 H8 K0 K4 K442 M210 M211 M272
          M283 M311 M312 M321 M332 M342 M373 M392 M414 M510 M520 M532 M540
          M710 M720 N211 N241 N243 N312 N512 N513 P420 P446 P517 P523 P528
          P633 P646 P714 P721 P942 M905 M904
          DCN: RAI2EA-N RAI2EA-P RAI2EA-T
          DCR: 1086070-N 1086070-P 1086070-T
          C216 F010 F019 F020 F029 G001 G002 G010 G011 G012 G013 G019 G020
          G021 G022 G029 G040 G100 G111 G221 G299 H600 H681 H682 H683 H7
          H721 J011 J271 K0 K4 K442 L145 M210 M211 M212 M213 M214 M215
          M216 M231 M232 M233 M272 M280 M281 M311 M312 M313 M314 M315 M316
          M321 M322 M331 M332 M333 M334 M340 M342 M343 M344 M349 M352 M371
          M373 M391 M392 M413 M414 M510 M520 M521 M522 M530 M531 M532 M540
          M630 M640 M650 M710 M720 N211 N241 N243 N312 N512 N513 P420 P446
          P517 P523 P528 P633 P646 P714 P721 P942 M905 M904
          MCN: 0157-19401-N 0157-19401-P 0157-19401-T
          C316 F010 F019 F020 F029 G001 G002 G010 G011 G012 G013 G019 G020
          G021 G022 G029 G040 G100 G111 G221 G299 H600 H681 H682 H683 H7
          H721 J011 J271 K0 K4 K442 L145 M210 M211 M212 M213 M214 M215
          M216 M231 M232 M233 M272 M280 M281 M311 M312 M313 M314 M315 M316
          M321 M322 M331 M332 M333 M334 M340 M342 M343 M344 M349 M352 M371
          M373 M391 M392 M413 M414 M510 M520 M521 M522 M530 M531 M532 M540
          M720 N301 N382 N512 M905 M904
          MCN: 0157-19404-K 0157-19404-P
M2 *96*
          C216 F010 F020 G001 G002 G010 G011 G012 G013 G020 G021 G022 G029
          G040 G100 G221 H600 H681 H682 H683 J0 J011 J012 J1 J171 J271 K0
          K4 K442 L145 M210 M211 M212 M213 M214 M215 M216 M231 M232 M233
          M272 M280 M281 M311 M312 M313 M314 M315 M316 M321 M322 M331 M332
          M333 M334 M340 M342 M343 M344 M349 M352 M371 M373 M381 M391 M413
          M414 M510 M520 M521 M530 M531 M540 M710 M730 M905 M904
          MCN: 0157-19402-N 0157-19402-S
M2 *97*
          F010 F019 F020 F029 G001 G002 G010 G011 G012 G013 G019 G020 G021
          G022 G029 G040 G100 G111 G221 G299 H5 H592 H594 H598 H600 H681
          H682 H683 H7 H721 H9 J011 J271 L145 M210 M211 M212 M213 M214
          M215 M216 M231 M232 M233 M272 M280 M281 M311 M312 M313 M314 M315
          M316 M321 M322 M331 M332 M333 M334 M340 M342 M343 M344 M349 M352
          M371 M373 M391 M392 M413 M414 M510 M520 M521 M522 M530 M531 M532
          M540 M710 M720 N214 N312 N352 N512 M905 M904
          MCN: 0157-19403-N 0157-19403-P
M2 *99*
          C216 F010 F019 F020 F029 G001 G002 G010 G011 G012 G013 G019 G020
          G021 G022 G029 G040 G100 G111 G221 G299 H600 H681 H682 H683 H7
          H721 J011 J271 K0 K4 K442 L145 M210 M211 M212 M213 M214 M215
          M216 M231 M232 M233 M272 M280 M281 M311 M312 M313 M314 M315 M316
          M321 M322 M331 M332 M333 M334 M340 M342 M343 M344 M349 M352 M371
          M373 M391 M392 M413 M414 M431 M510 M520 M521 M522 M530 M531 M532
          M540 M630 M640 M650 M782 M905 M904
          MCN: 0157-19401-K 0157-19401-M 0157-19401-Q
```

2 ANSWERS

=> => d que stat L7 STR

Cy~CH~\frac{3}{5}~\General C==Cy\Cy\frac{1}{5} \frac{1}{6}

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L8 2 SEA FILE=REGISTRY SSS SAM L7

13.6% PROCESSED 2000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*
BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 286244 TO 300756 PROJECTED ANSWERS: 64 TO 522

=> d his ful

(FILE 'HOME' ENTERED AT 15:50:32 ON 12 APR 2007)

FILE 'ZCAPLUS' ENTERED AT 15:50:45 ON 12 APR 2007 E US2006-574993/APPS

FILE 'HCAPLUS' ENTERED AT 15:51:09 ON 12 APR 2007
L1 1 SEA ABB=ON PLU=ON US2006-574993/APPS
SAVE TEMP L1 NWA993HCAAPP/A

FILE 'WPIX' ENTERED AT 15:51:29 ON 12 APR 2007
L2 1 SEA ABB=ON PLU=ON US2006-574993/APPS
SAVE TEMP L2 NWA993WPIAPP/A

FILE 'STNGUIDE' ENTERED AT 15:51:47 ON 12 APR 2007 D QUE L1

FILE 'HCAPLUS' ENTERED AT 15:52:28 ON 12 APR 2007 D IBIB ED AB IN L1

FILE 'STNGUIDE' ENTERED AT 15:52:28 ON 12 APR 2007

- FILE 'HCAPLUS' ENTERED AT 15:53:07 ON 12 APR 2007 D IND L1
- FILE 'STNGUIDE' ENTERED AT 15:53:07 ON 12 APR 2007 D QUE L2
- FILE 'WPIX' ENTERED AT 15:53:21 ON 12 APR 2007 D IALL CODE L2
- FILE 'STNGUIDE' ENTERED AT 15:53:24 ON 12 APR 2007
- FILE 'REGISTRY' ENTERED AT 15:58:34 ON 12 APR 2007
- FILE 'HCAPLUS' ENTERED AT 15:58:38 ON 12 APR 2007
  L3 TRA PLU=ON L1 1- RN : 282 TERMS
- FILE 'REGISTRY' ENTERED AT 15:58:41 ON 12 APR 2007
  L4 282 SEA ABB=ON PLU=ON L3
  SAVE TEMP L4 NWA993REGAPP/A
  - FILE 'STNGUIDE' ENTERED AT 15:59:19 ON 12 APR 2007
- FILE 'LREGISTRY' ENTERED AT 16:38:42 ON 12 APR 2007 L5 STR
- FILE 'REGISTRY' ENTERED AT 16:40:09 ON 12 APR 2007 L6. 13 SEA SSS SAM L5
  - FILE 'STNGUIDE' ENTERED AT 16:40:16 ON 12 APR 2007
  - FILE 'REGISTRY' ENTERED AT 16:42:09 ON 12 APR 2007
- FILE 'LREGISTRY' ENTERED AT 16:42:31 ON 12 APR 2007 L7 STR L5
- FILE 'REGISTRY' ENTERED AT 16:43:02 ON 12 APR 2007
  L8 2 SEA SSS SAM L7
  D SCAN
  - FILE 'STNGUIDE' ENTERED AT 16:43:35 ON 12 APR 2007
  - FILE 'LREGISTRY' ENTERED AT 16:43:38 ON 12 APR 2007
    D QUE STAT
    SAVE TEMP L7 NWA993STRQ/Q
  - FILE 'STNGUIDE' ENTERED AT 16:44:17 ON 12 APR 2007
    D SAVED
    D QUE STAT

FILE HOME

FILE ZCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the

American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 12 Apr 2007 VOL 146 ISS 16 FILE LAST UPDATED: 11 Apr 2007 (20070411/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

#### FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Apr 2007 VOL 146 ISS 16 FILE LAST UPDATED: 11 Apr 2007 (20070411/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX

FILE LAST UPDATED: 4 APR 2007 <20070404/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200723 <200723/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> New reloaded DWPI Learn File (LWPI) available as well <<<
- >>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<
- >>> IPC Reform backfile reclassification has been loaded to 31 December
  2006. No update date (UP) has been created for the reclassified
  documents, but they can be identified by 20060101/UPIC and
  20061231/UPIC. <<<</pre>

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training\_center/patents/stn\_guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE <a href="http://scientific.thomson.com/support/patents/coverage/latestupdates/">http://scientific.thomson.com/support/patents/coverage/latestupdates/</a>

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE http://www.stn-international.de/stndatabases/details/ipc reform.html and

### http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX PLEASE SEE

http://www.stn-international.de/stndatabases/details/dwpi r.html <<</pre>

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 6, 2007 (20070406/UP).

FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 APR 2007 HIGHEST RN 929721-97-1 DICTIONARY FILE UPDATES: 11 APR 2007 HIGHEST RN 929721-97-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE LREGISTRY

LREGISTRY IS A STATIC LEARNING FILE

NEW CAS INFORMATION USE POLICIES, ENTER HELP USAGETERMS FOR DETAILS.

=> => d que stat 19 L7

$$Cy \sim G1 \sim 3 \sim 4 \simeq 5 \sim 6$$

REP G1 = (0-1) CH

NODE ATTRIBUTES:

CONNECT IS E3 RC AT CONNECT IS E2 RC AT CONNECT IS E2 RC AT

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT

IS UNS AT GGCAT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

547 SEA FILE=REGISTRY SSS FUL L7

100.0% PROCESSED 570150 ITERATIONS

SEARCH TIME: 00.00.04

547 ANSWERS

=> d que stat 112

NODE ATTRIBUTES:

CONNECT IS E3 RC AT

CONNECT IS E2 RC AT CONNECT IS E2 RC AT

DEFAULT MLEVEL IS ATOM

IS UNS AT GGCAT

IS UNS AT GGCAT

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L7 STR

REP G1=(0-1) CH

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3

CONNECT IS E2 RC AT 4

CONNECT IS E2 RC AT 5

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 1

GGCAT IS UNS AT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L9 547 SEA FILE=REGISTRY SSS FUL L7

L12 339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6

100.0% PROCESSED 547 ITERATIONS 339 ANSWERS

SEARCH TIME: 00.00.01

=> d que nos 189

L6 STR L7 STR

L9 547 SEA FILE=REGISTRY SSS FUL L7

L12 339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6

L89 ANALYZE PLU=ON L12 1- LC : 7 TERMS

=> d 189 1-7

L89 ANALYZE L12 1- LC : 7 TERMS

TERM #	# occ	# DOC	% DOC	LC
1	339	339	100.00	CA
2	339	339	100.00	CAPLUS
3	323	323	95.28	TOXCENTER
4	264	264	77.88	USPATFULL
5	13	13	3.83	CASREACT
6	3	3	0.88	BEILSTEIN
7	1	1	0.29	CAOLD
*****	* END C	F L89	***	

=> d que stat 117 L15 STR

REP G1=(0-1) CH
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 3
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 11
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

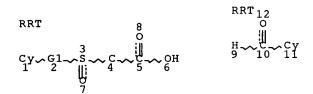
STEREO ATTRIBUTES: NONE

L17 3 SEA FILE=CASREACT SSS FUL L15 ( 8 REACTIONS)

100.0% DONE 54210 VERIFIED 8 HIT RXNS 3 DOCS

SEARCH TIME: 00.00.07

=> d que stat 119 L15 STF



REP G1=(0-1) CH
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 3
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 11
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L19 1 SEA FILE=CHEMINFORMRX SSS FUL L15 ( 1 REACTIONS)

100.0% DONE 11195 VERIFIED 1 HIT RXNS 1 DOCS

SEARCH TIME: 00.00.41

=> d que stat 129 L7 STR

 $Cy \sim G1 \sim 35 \sim C = C \sim Cy$   $1 \sim 2 \sim 100$   $7 \sim 4 \sim C \sim Cy$ 

REP G1=(0-1) CH
NODE ATTRIBUTES:
CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 1 GGCAT IS UNS AT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L29 0 SEA FILE=CHEMINFORMRX SSS SAM L7 ( 0 REACTIONS)

35.8% DONE 1000 VERIFIED 0 HIT RXNS 0 DOCS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.03

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED VERIFICATIONS: 52827 TO 59053

PROJECTED ANSWERS: 0 TO 0

=> d que stat 130

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3

CONNECT IS E2 RC AT 4

CONNECT IS E2 RC AT 5

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 1

GGCAT IS UNS AT

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L30 0 SEA FILE=CHEMINFORMRX SSS SAM L6 ( 0 REACTIONS)

73.9% DONE 1000 VERIFIED 0 HIT RXNS 0 DOCS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED VERIFICATIONS: 24893 TO 29267

PROJECTED ANSWERS: 0 TO

⇒> d que stat 131

6 STF

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3

CONNECT IS E2 RC AT 4

CONNECT IS E2 RC AT 5

DEFAULT MLEVEL IS ATOM

GGCAT IS UNS AT 1 GGCAT IS UNS AT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L31 3 SEA FILE=CHEMINFORMRX SSS FUL L6 ( 5 REACTIONS)

85.9% DONE 30000 VERIFIED 5 HIT RXNS 3 DOCS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.15

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED VERIFICATIONS: 34925 TO 34925

PROJECTED ANSWERS: 3 TO 8

=> d que stat 126

G STR

Cy~CH~\$ 3 ~ C == C~Cy

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L26 11 SEA FILE=BEILSTEIN SSS FUL L6

100.0% PROCESSED 99943 ITERATIONS

11 ANSWERS

**SEARCH TIME: 00.00.35** 

=> d que nos 127

L6 STR

L26 11 SEA FILE=BEILSTEIN SSS FUL L6

L27 6 SEA FILE=BEILSTEIN ABB=ON PLU=ON L26 NOT BABSAN/FA

=> d his 126-128

(FILE 'BEILSTEIN' ENTERED AT 07:30:09 ON 13 APR 2007)

L26 11 S L6 FUL

SAVE TEMP L26 NWA993BEIP/A

L27 6 S L26 NOT BABSAN/FA SELECT L26 1- BABSAN

FILE 'BABS' ENTERED AT 07:32:22 ON 13 APR 2007

L28 8 S E1-E8/AN

=> d que 128

L28 8 SEA FILE=BABS ABB=ON PLU=ON (6121948/AN OR 6011603/AN OR

5521334/AN OR 5542760/AN OR 6443896/AN OR 5571926/AN OR

6282045/AN OR 6294163/AN)

=> d que 188

L6 STR

Cy~CH~\$ C-Cy 4 5 6

### NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

#### GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE L7 STR

REP G1=(0-1) CH

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

### GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

#### STEREO ATTRIBUTES: NONE

L9	547	SEA	FILE=REG	ISTRY SS	S FUL L7
L12	339	SEA	FILE=REG	ISTRY SU	B=L9 SSS FUL L6
L32		QUE	ABB=ON	PLU=ON	REDDY, E?/AU
L33		QUE	ABB=ON	PLU=ON	REDDY, P?/AU
L34		QUE	ABB=ON	PLU=ON	REDDY, M?/AU
L35		QUE	ABB=ON	PLU=ON	REDDY, R?/AU
L36		QUE	.ABB=ON	PLU=ON	BELL, S?/AU
L37		QUE	ABB=ON	PLU=ON	(TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
		)/cs	,SO,PA		
L39		QUE	ABB=ON	PLU=ON	PROLIFER?
L40		QUE	ABB=ON	PLU=ON	DISEAS? OR DISORDER? OR SYNDROM? OR
		MALA	DY OR SI	CKNESS O	R ILLNESS OR CONDITION .
L41		QUE	ABB=ON	PLU=ON	HEMANGIOMAT?
L42		QUE	ABB=ON	PLU=ON	MULTIPLE (W) SCLERO?
L43		QUE	ABB=ON	PLU=ON	MS
L44		QUE	ABB=ON	PLU=ON	MYELODEGENER?
L45		QUE	ABB=ON	PLU=ON	?DEGENER? (3A) ?MYELO?
L46		QUE	ABB=ON	PLU=ON	GANGLIONEUROMATO?
L47		QUE	ABB=ON	PLU=ON	KELOID?

```
L48
                QUE ABB=ON PLU=ON PAGET?
L49
                QUE ABB=ON PLU=ON FIBROCYS?
                QUE ABB=ON PLU=ON COLORECT?
L50
                QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER?
L51
                QUE ABB=ON PLU=ON BRAIN?
L52
L53
                QUE ABB=ON PLU=ON LEUKEM? OR LEUKAEM?
L54
                QUE ABB=ON PLU=ON IONIZ? OR IONIS?
L55
                QUE ABB=ON PLU=ON RADIATION
                QUE ABB=ON PLU=ON OPTIC?
L56
                QUE ABB=ON PLU=ON ISOMER?
QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?
QUE ABB=ON PLU=ON SARCOID?
L57
L58
L59
                QUE ABB=ON PLU=ON PERONIES
L60
L61
                QUE ABB=ON PLU=ON DUPUTREN
                QUE ABB=ON PLU=ON FIBROSIS
L62
                QUE ABB=ON PLU=ON CIRRHO?
L63
               QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?
QUE ABB=ON PLU=ON ?VASCULAR?
L64
L65
L66
               QUE ABB=ON PLU=ON RESTENO?
L67
                QUE ABB=ON PLU=ON ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?S
                ARCOM? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR
                ?DYPLAS?
                QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISA
L68
                RCOM? OR ANTITUM? OR ANTINEOPLAS?
L69
                QUE ABB=ON PLU=ON OVARY OR OVARIAN
L70
                QUE 'ABB=ON PLU=ON BREAST OR MAMMAR?
L71
                QUE ABB=ON PLU=ON PROSTAT?
                QUE ABB=ON PLU=ON TESTIS OR TESTIC?
L72
                QUE ABB=ON PLU=ON LUNG
L73
                QUE ABB=ON PLU=ON PULMONAR?
QUE ABB=ON PLU=ON KIDNEY OR RENAL?
L74
L75
             15 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L77
             6 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L39 OR L40 OR L41 OR
L78
                L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR
                L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR
                L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR
                L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
L79
                QUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
L80
                QUE ABB=ON PLU=ON MANUFACT?
L81
            14 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L79 OR L80)
L82
             15 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 OR L78 OR L81
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR
                L35 OR L36 OR L37)
L84
                QUE ABB=ON PLU=ON AY<2004 OR PY<2004 OR PRY<2004 OR MY
                <2004 OR REVIEW/DT
L86
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 NOT L83
L87
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND L84
L88
             11 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 OR L87
=> d que nos 193
L6
                STR
L7
                STR
            547 SEA FILE=REGISTRY SSS FUL L7
L9
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
                QUE ABB=ON PLU=ON REDDY, E?/AU
L32
                QUE ABB=ON PLU=ON REDDY, P?/AU
L33
                QUE ABB=ON PLU=ON REDDY, M?/AU
L34
L35
                QUE ABB=ON PLU=ON REDDY, R?/AU
```

QUE ABB=ON PLU=ON BELL, S?/AU

L36

```
QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
L37
               )/CS,SO,PA
           264 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND USPATFULL/LC
L90
             1 SEA FILE=USPATFULL ABB=ON PLU=ON L90
L91
             1 SEA FILE-USPATFULL ABB-ON PLU-ON L91 AND (L32 OR L33 OR L34
L92
               OR L35 OR L36 OR L37)
             O SEA FILE=USPATFULL ABB=ON PLU=ON L91 NOT L92
ь93 •
=> d que nos 197
               STR
L7
                STR
L9
            547 SEA FILE=REGISTRY SSS FUL L7
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L12
               QUE ABB=ON PLU=ON REDDY, E?/AU
L32
               QUE ABB=ON PLU=ON REDDY, P?/AU
L33
               QUE ABB=ON PLU=ON REDDY, M?/AU
L34
               QUE ABB=ON PLU=ON REDDY, R?/AU
L35
               QUE ABB=ON PLU=ON BELL, S?/AU
L36
               QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO (W) NOVA)
L37
                )/CS,SO,PA
          323 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND TOXCENTER/LC
L94
             3 SEA FILE=TOXCENTER ABB=ON PLU=ON L94
L95
              3 SEA FILE=TOXCENTER ABB=ON PLU=ON L95 AND (L32 OR L33 OR L34
L96
               OR L35 OR L36 OR L37)
L97
              O SEA FILE=TOXCENTER ABB=ON PLU=ON L95 NOT L96
=> d que nos 199
L6
                STR
L7
                STR
           547 SEA FILE=REGISTRY SSS FUL L7
           339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L12
            13 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND CASREACT/LC
L98
              6 SEA FILE=CASREACT ABB=ON PLU=ON L98
L99
=> => d que nos 1101
                STR
L6
L7
                STR
           547 SEA FILE=REGISTRY SSS FUL L7
L9
L12
           339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
            1 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND CAOLD/LC
L100
            1 SEA FILE=CAOLD ABB=ON PLU=ON L100
L101
=> d his 1100-1102
     (FILE 'REGISTRY' ENTERED AT 08:15:50 ON 13 APR 2007)
             1 S L12 AND CAOLD/LC
     FILE 'CAOLD' ENTERED AT 08:16:01 ON 13 APR 2007
L101
              1 S L100
                SELECT L101 1- AN
     FILE 'HCAPLUS' ENTERED AT 08:16:26 ON 13 APR 2007
L102
           2 S E9/OREF
=> d que nos 1102
L102 2 SEA FILE=HCAPLUS ABB=ON PLU=ON "CA59:5004B"/OREF
```

=> d que stat 1104 L6 STR

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L104 112 SEA FILE=WPIX SSS FUL L6

100.0% PROCESSED 14045 ITERATIONS

ITERATIONS 112 ANSWERS

SEARCH TIME: 00.00.11

# => d his 1104-1109

(FILE 'WPIX' ENTERED AT 08:18:03 ON 13 APR 2007) L104 112 S L6 FUL SAVE TEMP L104 NWA993WPIS/A L105 4 S L104/DCR SELECT L104 1- SDCN L106 4 S E10-E121/DCN L107 4 S L105 OR L106 L108 4 S L107 AND L32-L37 L109 0 S L107 NOT L108 => d que nos 1109 1.6 STR QUE ABB=ON PLU=ON REDDY, E?/AU L32 L33 QUE ABB=ON PLU=ON REDDY, P?/AU L34 QUE ABB=ON PLU=ON REDDY, M?/AU L35 QUE ABB=ON PLU=ON REDDY, R?/AU QUE ABB=ON PLU=ON BELL, S?/AU Ľ36 QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA) L37 )/CS,SO,PA 112 SEA FILE=WPIX SSS FUL L6 L104 L105 4 SEA FILE=WPIX ABB=ON PLU=ON L104/DCR L106 4 SEA FILE-WPIX ABB-ON PLU-ON (RAI110/DCN OR RAI110/DCN OR RAI11R/DCN OR RAI11S/DCN OR RAI11T/DCN OR RAI11U/DCN OR RAI12A/DCN OR RAI12B/DCN OR RAI12C/DCN OR RAI12D/DCN OR RAI12E/DCN OR RAI12F/DCN OR RAI12G/DCN OR RAI12H/DCN OR RAI2CA/DCN OR RAI2CB/DCN OR RAI2CC/DCN OR RAI2CD/DCN OR RAI2CE/DCN OR RAI2CF/DCN OR RAI2CG/DCN OR RAI2CH/DCN OR

```
RAI2CJ/DCN OR RAI2CK/DCN OR RAI2CL/DCN OR RAI2CM/DCN OR
                RAI2CN/DCN OR RAI2CO/DCN OR RAI2CP/DCN OR RAI2CQ/DCN OR
                RAI2CR/DCN OR RAI2CS/DCN OR RAI2CT/DCN OR RAI2CU/DCN OR
                RAI2CV/DCN OR RAI2CW/DCN OR RAI2CX/DCN OR RAI2CY/DCN OR
                RAI2CZ/DCN OR RAI2C5/DCN OR RAI2C6/DCN OR RAI2C7/DCN OR
                RAI2C8/DCN OR RAI2C9/DCN OR RAI2DA/DCN OR RAI2DB/DCN OR
                RAI2DC/DCN OR RAI2DD/DCN OR RAI2DE/DCN OR RAI2DF/DCN OR
                RAI2DG/DCN OR RAI2DH/DCN OR RAI2DJ/DCN OR RAI2DJ/DCN OR
                RAI2DK/DCN OR RAI2DL/DCN OR RAI2DM/DCN OR RAI2DN/DCN OR
                RAI2DO/DCN OR RAI2DP/DCN OR RAI2DQ/DCN OR RAI2DR/DCN OR
                RAI2DS/DCN OR RAI2DT/DCN OR RAI2DU/DCN OR RAI2DV/DCN OR
                RAI2DX/DCN OR RAI2DY/DCN OR RAI2DZ/DCN OR RAI2D0/DCN OR
                RAI2D1/DCN OR RAI2D2/DCN OR RAI2D3/DCN OR RAI2D4/DCN OR
                RAI2D5/DCN OR RAI2D6/DCN OR RAI2D7/DCN OR RAI2D8/DCN OR
                RAI2D9/DCN OR RAI2EA/DCN OR RAI2E0/DCN OR RAI2E1/DCN OR
                RAI2E2/DCN OR RAI2E3/DCN OR RAI2E4/DCN OR RAI2E5/DCN OR
                RAI2E6/DCN OR RAI2E7/DCN OR RAI2E8/DCN OR RAI2E9/DCN OR
                RAJKMO/DCN OR RAJKMP/DCN OR RAJKN1/DCN OR RAJKN2/DCN OR
                RAJKN3/DCN OR RAJKOB/DCN OR RAJKOC/DCN OR RAJKOD/DCN OR
                RAJKOE/DCN OR RAJKOF/DCN OR RAJKOG/DCN OR RAJKOH/DCN OR
                RAJKOI/DCN OR RAJKOO/DCN OR RANXKV/DCN OR RANXKW/DCN OR
                RANXKX/DCN OR RANXKY/DCN OR RANXKZ/DCN OR RANXLO/DCN OR
                RANXL1/DCN OR RANXL2/DCN)
L107
              4 SEA FILE=WPIX ABB=ON PLU=ON L105 OR L106
L108
              4 SEA FILE-WPIX ABB-ON PLU-ON L107 AND (L32 OR L33 OR L34 OR
               L35 OR L36 OR L37)
L109
              O SEA FILE-WPIX ABB-ON PLU-ON L107 NOT L108
=> d his 1122
     (FILE 'MEDLINE, BIOSIS, EMBASE, CABA, AGRICOLA, DRUGU, VETU, BIOTECHNO'
     ENTERED AT 08:35:55 ON 13 APR 2007)
L122
             0 S L121
=> d que nos 1122
L6
                STR
L7
                STR
L9
            547 SEA FILE=REGISTRY SSS FUL L7
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L121
               SEL PLU=ON L12 1- CHEM: 412 TERMS
```

L122

0 SEA L121

=> fil beilst

FILE 'BEILSTEIN' ENTERED AT 09:01:55 ON 13 APR 2007 COPYRIGHT (c) 2007 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE LAST UPDATED ON JANUARY 10, 2007

FILE COVERS 1771 TO 2006.
\*\*\* FILE CONTAINS 9,780,003 SUBSTANCES \*\*\*

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

- \* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.
- \* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE
- \* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE
- \* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.

NEW

- \* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.
- \* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.
- => d 127 ide 1
- L27 ANSWER 1 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 9699047

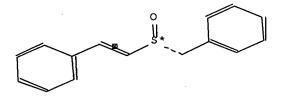
Chemical Name (CN): <Rs>-(E)-2-phenylethenyl benzyl sulfoxide

Molec. Formula (MF): C15 H14 O S

Molecular Weight (MW): 242.34 Lawson Number (LN): 5336, 5231

File Segment (FS): Stereo compound

Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 2293105
Tautomer ID (TAUTID): 2490834
Entry Date (DED): 2004/10/23
Update Date (DUPD): 2004/10/23



#### Field Availability:

Code	Name	Occurrence
=======		
BRN	Beilstein Records	1
CN	Chemical Name	. 1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	, 2
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
DED	Entry Date	1
DUPD	Update Date	1

### This substance also occurs in Reaction Documents:

Code	Name	Occurrence
=======		
RX	Reaction Documents	1
RXPRO	Substance is Reaction Product	1

#### => d 127 rx 1

# L27 ANSWER 1 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

# Reaction:

RX

Reaction ID (.ID): 9592691

Reactant BRN (.RBRN): 8813116, 3588244

Reactant (.RCT): cholesteryl (RS)-(E)-2-

phenylethenesulfinate, benzylmagnesium

bromide

Product BRN (.PBRN): 9699046, 9699047

No. of React. Details (.NVAR): 1

#### Reaction Details:

DΥ

Reaction RID (.RID): 9592691.1
Reaction Classification (.CL): Preparation Solvent (.SOL): benzene
Temperature (.T): 6 Cel

Note(s) (.COM): Title compound not separated from

# byproducts ·

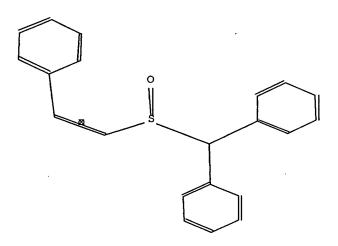
#### Reference(s):

Strickler, Rick R.; Motto, John M.; Humber, Craig C.; Schwan, Adrian L., Can. J. Chem., CODEN: CJCHAG, 81(6), <2003>, 423 - 430; BABS-6443896

### => d 127 ide 2

### L27 ANSWER 2 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 8114107 Molec. Formula (MF): C21 H18 O S Molecular Weight (MW): 318.43 5523, 5336 Lawson Number (LN): File Segment (FS): Stereo compound Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 6334519 Tautomer ID (TAUTID): 7072389 Beilstein Citation (BSO): 6-06 Entry Date (DED): 1999/05/06 Update Date (DUPD): 1999/05/06



#### Field Availability:

Name	Occurrence
	=======================================
Beilstein Records	1
Chemical Name	1
Autonomname	1
Molecular Formula	1
Formular Weight	1
Lawson Number	2
File Segment	1
Compound Type	1
	Beilstein Records Chemical Name Autonomname Molecular Formula Formular Weight Lawson Number File Segment

			10/574,993
	CONSID- TAUTID BSO DED DUPD	Constitution ID Tautomer ID Beilstein Citation Entry Date Update Date	1 1 1 1 1
Т	his substa	nce also occurs in Rea	ction Documents:
	Code	Name	Occurrence
	RX RXREA RXPRO		
=> d	127 rx 2		
L27 Reac	ANSWER 2	OF 6 BEILSTEIN COPYRIG	HT 2007 BEILSTEIN MDL on STN
RX	Reactant Product B Product (	BRN (.RBRN): (.RCT): RN (.PBRN):	5010769 605461, 2088902 ethynylbenzene, diphenyl-methanethiol 8114107 C21H18OS
Reac RX	tion Detai	ls:	
	Reaction Reagent ( Note(s) ( Reference 1. Schwan Rietve	<pre>.COM): (s): , Adrian L.; Strickler</pre>	5010769.1 Preparation 2.) MCPBA Yield given. Multistep reaction , Rick R.; Lear, Yvonne; Kalin, Mark L.; J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,
Reac RX	tion:		
	Reactant Product B Product (	BRN (.RBRN): (.RCT): RN (.PBRN):	5039972 8114107 C21H180S 7514179 2-phenyl-ethenesulfinyl chloride 1
Reac RX	tion Detai	ls:	
		RID (.RID): Classification (CL):	5039972.1

# Read

Reaction Classification (.CL): Preparation SO2C12

Reagent (.RGT): Solvent (.SOL): CH2C12

1) -78 deg C, 10 min; 2) -78 deg C --> rt, Other Conditions (.COND):  $30 \ \text{min}$ 

### Reference(s):

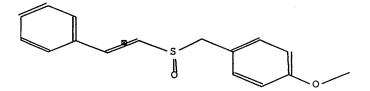
1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.; Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,

### 7825-7832; BABS-6121948

#### => d 127 ide 3

#### L27 ANSWER 3 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 7516650 Molec. Formula (MF): C16 H16 O2 S 272.36 Molecular Weight (MW): 5912, 5336, 289 Lawson Number (LN): File Segment (FS): Stereo compound Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 6414604 Tautomer ID (TAUTID): 7153514 Beilstein Citation (BSO): 6-06 1996/11/12 Entry Date (DED): Update Date (DUPD): 1999/05/07



### Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	
		1
CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	. 1
FW	Formular Weight	1
LN	Lawson Number	3
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	. 1
BSO	Beilstein Citation	1
DED	Entry Date	· 1
DUPD	Update Date	1

#### This substance also occurs in Reaction Documents:

Code	Name	Occurrence
=======		
RX	Reaction Documents	4
RXREA	Substance is Reaction Reactant	2
RXPRO	Substance is Reaction Product	2

```
=> d 127 rx 3
```

```
L27 ANSWER 3 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN
Reaction:
RX
     Reaction ID (.ID):
                                     5000809
     Reactant BRN (.RBRN):
                                     1237746, 386303
     Reactant (.RCT):
                                     phenylthiirane S-oxide,
                                     1-bromomethyl-4-methoxy-benzene
     Product BRN (.PBRN):
                                     7516650, 7481013
     Product (.PRO):
                                     C16H16O2S, C16H16O2S
    No. of React. Details (.NVAR): 1
Reaction Details:
RX
     Reaction RID (.RID):
                                     5000809.1
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                     1.) LiHMDS
     Note(s) (.COM):
                                     Yield given. Multistep reaction. Yields of
                                     byproduct given
     Reference(s):
     1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.;
        Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,
        7825-7832; BABS-6121948
Reaction:
RX
     Reaction ID (.ID):
                                     4476062
     Reactant BRN (.RBRN):
                                     7473708, 386303
     Reactant (.RCT):
                                     C8H7OS(1-), 1-bromomethyl-4-methoxy-
                                     benzene
     Product BRN (.PBRN):
                                     7516650
     Product (.PRO):
                                     C16H16O2S
     No. of React. Details (.NVAR): 1
Reaction Details:
RX
     Reaction RID (.RID):
                                     4476062.1
     Reaction Classification (.CL): Preparation
     Yield (.YDT):
                                     43 percent (BRN=7516650)
     Reference(s):
     1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian;
        Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>,
        2345-2348; BABS-6011603
Reaction:
RX
     Reaction ID (.ID):
                                     5016954
     Reactant BRN (.RBRN):
                                     7516650
     Reactant (.RCT):
                                     C16H16O2S
     Product BRN (.PBRN):
                                     7514180
     Product (.PRO):
                                     2-phenyl-ethenesulfinyl chloride
     No. of React. Details (.NVAR): 1
Reaction Details:
RX
     Reaction RID (.RID):
                                     5016954.1
```

Reaction Classification (.CL): Preparation Reagent (.RGT): SO2C12 Solvent (.SOL): CH2C12 Other Conditions (.COND): 1) -78 deg C, 10 min; 2) -78 deg C --> rt, 30 min Reference(s): 1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.; Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>, 7825-7832; BABS-6121948 Reaction: RX 4468765 Reaction ID (.ID): Reactant BRN (.RBRN): 7516650, 1857542 Reactant (.RCT): C16H16O2S, 3-phenyl-propan-1-ol Product BRN (.PBRN): 7516439 Product (.PRO): 2-phenyl-ethenesulfinic acid 3-phenyl-propyl ester No. of React. Details (.NVAR): Reaction Details: RX Reaction RID (.RID): 4468765.1 Reaction Classification (.CL): Preparation Reagent (.RGT): 1.) SO2Cl2; 2.) K2CO3 Other Conditions (.COND): 1.) CH2Cl2, -78 deg C to r.t.; 2.) CH2Cl2, -78 deg C to r.t. Note(s) (.COM): Yield given. Multistep reaction Reference(s): 1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian; Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>, 2345-2348; BABS-6011603 => d 127 ide 4 L27 ANSWER 4 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN 7516649 Beilstein Records (BRN): Molec. Formula (MF): C16 H16 O2 S 272.36 Molecular Weight (MW): 5912, 5336, 289 Lawson Number (LN): File Segment (FS): Stereo compound Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 6414604 Tautomer ID (TAUTID): 7153514 Beilstein Citation (BSO): 6-06 Entry Date (DED): 1996/11/12 Update Date (DUPD): 1999/05/07

### Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	3
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
DED	Entry Date	1
DUPD	Update Date	1

#### This substance also occurs in Reaction Documents:

Code	Name	Occurrence
========		
RX	Reaction Documents	4
RXREA	Substance is Reaction Reactant	2
RXPRO	Substance is Reaction Product	2

=> d 127 rx 4

# L27 ANSWER 4 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

### Reaction:

RX

Reaction ID (.ID): 5003978

Reactant BRN (.RBRN): 605461, 471686

Reactant (.RCT): ethynylbenzene, (4-methoxy-phenyl)-

methanethiol

Product BRN (.PBRN): 7516649
Product (.PRO): C16H16O2S

No. of React. Details (.NVAR): 1

Reaction Details:

RX

```
5003978.1
     Reaction RID (.RID):
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                    2.) MCPBA
    Note(s) (.COM):
                                    Yield given. Multistep reaction
     Reference(s):
     1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.;
        Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,
        7825-7832; BABS-6121948
Reaction:
RX
                                    4486322
     Reaction ID (.ID):
                                    6846379
     Reactant BRN (.RBRN):
                                    (Z)-1-<(4-Methoxybenzyl)thio>-2-
    Reactant (.RCT):
                                    phenylethylene
     Product BRN (.PBRN):
                                    7516649
                                    C16H16O2S
     Product (.PRO):
    No. of React. Details (.NVAR): 1
Reaction Details:
RX
     Reaction RID (.RID):
                                    4486322.1
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                    MCPBA
     Note(s) (.COM):
                                    Yield given
     Reference(s):
     1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian;
        Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>,
        2345-2348; BABS-6011603
Reaction:
RX
     Reaction ID (.ID):
                                    5016953
     Reactant BRN (.RBRN):
                                    7516649
                                    C16H16O2S
     Reactant (.RCT):
     Product BRN (.PBRN):
                                    7514179
     Product (.PRO):
                                    2-phenyl-ethenesulfinyl chloride
     No. of React. Details (.NVAR): 1
Reaction Details:
RX
     Reaction RID (.RID):
                                    5016953.1
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                    SO2C12
     Solvent (.SOL):
                                    CH2C12
     Other Conditions (.COND):
                                    1) -78 deg C, 10 min; 2) -78 deg C --> rt,
                                    30 min
     Reference(s):
     1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.;
        Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,
        7825-7832; BABS-6121948
Reaction:
RX
     Reaction ID (.ID):
                                    4468764
                                  7516649, 1857542
     Reactant BRN (.RBRN):
     Reactant (.RCT):
                                    C16H16O2S, 3-phenyl-propan-1-ol
     Product BRN (.PBRN):
                                    7516438
     Product (.PRO):
                                    2-phenyl-ethenesulfinic acid
                                    3-phenyl-propyl ester
```

No. of React. Details (.NVAR): 1

Reaction Details:

RX

Reaction RID (.RID): 4468764.1
Reaction Classification (.CL): Preparation

Reagent (.RGT): 1.) SO2C12; 2.) K2CO3

Other Conditions (.COND): 1.) CH2Cl2, -78 deg C to r.t.; 2.) CH2Cl2,

-78 deg C to r.t.

Note(s) (.COM): Yield given. Multistep reaction

Reference(s):

1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian; Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>, 2345-2348; BABS-6011603

=> d 127 ide 5 '

### L27 ANSWER 5 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 7481958

Chemical Name (CN): diphenylmethyl (E)-2-phenylethenyl

sulfoxide

Molec. Formula (MF):

Molecular Weight (MW):

Lawson Number (LN):

File Segment (FS):

C21 H18 O S

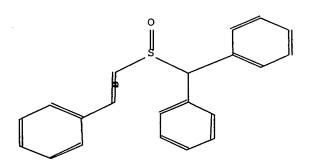
318.43

S523, 5336

Stereo compound

Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 6334519
Tautomer ID (TAUTID): 7072389
Beilstein Citation (BSO): 6-06

Entry Date (DED): 1996/11/12 Update Date (DUPD): 2001/07/25



#### Field Availability:

Code	Name	Occurr	ence
======		 	===
BRN	Beilstein Records	•	1

			10/5/4,993	
	CN	Chemical Name		1
	MF	Molecular Formula		1
	FW	Formular Weight		1
	LN	Lawson Number		2
				1
	FS	File Segment		
	CTYPE	Compound Type		1
	CONSID	Constitution ID		1
	TAUTID	Tautomer ID		1
	BSO	Beilstein Citation		1
	DED	Entry Date	•	1
	DUPD	Update Date		1
Т	his substa	nce also occurs in Read	ction Documents:	
	Code	Name	Occurrenc	ee
	=======			=
	RX	Reaction Documents		4
	RXREA	Substance is Reaction	Reactant	2
	RXPRO	Substance is Reaction	Product	2
=> d	127 rx 5		·	
			•	
- 0.5				
L27	ANSWER 5	OF 6 BEILSTEIN COPYRIGH	AT 2007 BEILSTEIN MDL	on STN
Reac RX	tion:			
	Reaction	TD (.TD):	5014030	
		BRN (.RBRN):	1237746, 638544	
	Reactant	· ·	phenylthiirane S-oxid	le .
	Reactant	(.RCI).	bromo-diphenyl-methan	
	Duadinat D	DN / DDDN) -	7481958, 7481885	ie
		RN (.PBRN):		
	Product (		C21H18OS, C21H18OS	
	No. of Re	act. Details (.NVAR):	1	
Reac RX	tion Detai	ls:		
	Reaction	RID (.RID):	5014030.1	
		Classification (.CL):		
	Reagent (		1.) LiHMDS	
	Note(s) (			ep reaction. Yields of
	MOCE(2) (	. COH) .	_	p reaccion. Itelas of
	Dofoses	(a)	byproduct given	
	Reference	- T T	Diele D Teen Versen	a. Kalia Maula I .
	Rietve	, Adrian L.; Strickler ld, Tanya E.; et al., 832; BABS-6121948		
_		•		
	tion:			
RX				
	Reaction		4485686	
		BRN (.RBRN):	7473708, 638544	
	Reactant		C8H7OS(1-), bromo-dip	henyl-methane
	Product B	RN (.PBRN):	7481958	
	Product (	.PRO):	C21H18OS	
	No. of Re	act. Details (.NVAR):	1	
	tion Detai	ls:		
RX		()	1105606 1	

Reaction RID (.RID):

4485686.1

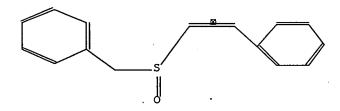
```
Reaction Classification (.CL):
                                     Preparation
                                     35 percent (BRN=7481958)
     Yield (.YDT):
     Reference(s):
     1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian;
        Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>,
        2345-2348; BABS-6011603
Reaction:
RX
     Reaction ID (.ID):
                                     5016885
     Reactant BRN (.RBRN):
                                     7481958
     Reactant (.RCT):
                                     diphenylmethyl (E)-2-phenylethenyl
                                     sulfoxide
     Product BRN (.PBRN):
                                     7514180
                                     2-phenyl-ethenesulfinyl chloride
     Product (.PRO):
     No. of React. Details (.NVAR): 2
Reaction Details:
RX
     Reaction RID (.RID):
                                     5016885.1
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                     SO2C12
                                    .CH2C12
     Solvent (.SOL):
     Time (.TIM):
                                     70 min
                                     -78 - 20 Cel
     Temperature (.T):
     Reference(s):
     1. Strickler, Rick R.; Schwan, Adrian L., Tetrahedron: Asymmetry, CODEN:
        TASYE3, 11(24), <2000>, 4843 - 4852; BABS-6282045
RX
     Reaction RID (.RID):
                                     5016885.2
     Reaction Classification (.CL): Preparation
                                     SO2C12
     Reagent (.RGT):
                                     CH2C12
    Solvent (.SOL):
     Other Conditions (.COND):
                                     1) -78 deg C, 10 min; 2) -78 deg C --> rt,
                                     30 min
     Reference(s):
     1. Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; Kalin, Mark L.;
        Rietveld, Tanya E.; et al., J.Org.Chem., CODEN: JOCEAH, 63(22), <1998>,
        7825-7832; BABS-6121948
Reaction:
RX
     Reaction ID (.ID):
                                     4468761
                                     7481958, 1857542
     Reactant BRN (.RBRN):
     Reactant (.RCT):
                                     C21H18OS, 3-phenyl-propan-1-ol
                                     7516439
     Product BRN (.PBRN):
     Product (.PRO):
                                     2-phenyl-ethenesulfinic acid
                                     3-phenyl-propyl ester
     No. of React. Details (.NVAR):
Reaction Details:
RX
                                     4468761.1
     Reaction RID (.RID):
     Reaction Classification (.CL): Preparation
     Reagent (.RGT):
                                     1.) SO2C12; 2.) K2CO3
     Other Conditions (.COND):
                                     1.) CH2Cl2, -78 deg C to r.t.; 2.) CH2Cl2,
                                     -78 deg C to r.t.
     Note(s) (.COM):
                                     Yield given. Multistep reaction
     Reference(s):
     1. Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; Xiang, Ting-Jian;
```

Brillon, Denis, Tetrahedron Lett., CODEN: TELEAY, 37(14), <1996>, 2345-2348; BABS-6011603

#### => d 127 ide 6

#### L27 ANSWER 6 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

Beilstein Records (BRN): 2523390 Beilstein Pref. RN (BPR): 88584-31-0 88584-31-0 CAS Reg. No. (RN): Chemical Name (CN): cis-1-Benzylmercapto-2-phenyl-ethen-S-oxid C15 H14 O S Molec. Formula (MF): Molecular Weight (MW): 242.34 5336, 5231 Lawson Number (LN): File Segment (FS): Stereo compound Compound Type (CTYPE): isocyclic Constitution ID (CONSID): 2293105 Tautomer ID (TAUTID): 2490834 Beilstein Citation (BSO): 5-06 Entry Date (DED): 1989/07/05 Update Date (DUPD): 1995/11/08



# Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
BPR	Beilstein Preferred RN	1
RN	CAS Registry Number	1
CN	Chemical Name	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	2
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
BSO	Beilstein Citation	1
DED	Entry Date	1
DUPD	Update Date	1
MP	Melting Point	1

#### This substance also occurs in Reaction Documents:

Code	Name	Occurrence	:e
========		-======	==
RX	Reaction Documents		1
RXPRO	Substance is Reaction Product		1

=> d 127 rx 6

### L27 ANSWER 6 OF 6 BEILSTEIN COPYRIGHT 2007 BEILSTEIN MDL on STN

#### Reaction:

RX

Reaction ID (.ID): 4230599

Reactant BRN (.RBRN): 605461, 605864

Reactant (.RCT): ethynylbenzene, phenylmethanethiol

Product BRN (.PBRN): 2523390

Product (.PRO): cis-1-Benzylmercapto-2-phenyl-ethen-S-oxid

No. of React. Details (.NVAR): 1

### Reaction Details:

RX

Reaction RID (.RID): 4230599.1
Reaction Classification (.CL): Preparation

Other Conditions (.COND): (i), (ii) H2O2, AcOH Note(s) (.COM): Multistep reaction

Reference(s):

 Pasto, D. J.; Miesel, J. L., J. Amer. Chem. Soc., CODEN: JACSAT, 85, <1963>, 2118-2124 => file stnguide FILE 'STNGUIDE' ENTERED AT 09:07:09 ON 13 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 6, 2007 (20070406/UP).

=> dup rem 188 117 119 131 128 193 197 199 1101 1102 1109 1122 L93 HAS NO ANSWERS
L97 HAS NO ANSWERS
L109 HAS NO ANSWERS
L122 HAS NO ANSWERS
DUPLICATE IS NOT AVAILABLE IN 'CHEMINFORMRX, CAOLD'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
FILE 'HCAPLUS' ENTERED AT 09:09:24 ON 13 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CASREACT' ENTERED AT 09:09:24 ON 13 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CHEMINFORMRX' ENTERED AT 09:09:24 ON 13 APR 2007 COPYRIGHT (C) FIZ-CHEMIE BERLIN

FILE 'BABS' ENTERED AT 09:09:24 ON 13 APR 2007 COPYRIGHT (c) 2007 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE 'CAOLD' ENTERED AT 09:09:24 ON 13 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS) PROCESSING COMPLETED FOR L88 PROCESSING COMPLETED FOR L17 PROCESSING COMPLETED FOR L19 PROCESSING COMPLETED FOR L31 PROCESSING COMPLETED FOR L28 PROCESSING COMPLETED FOR L93 PROCESSING COMPLETED FOR L97 PROCESSING COMPLETED FOR L99 PROCESSING COMPLETED FOR L101 PROCESSING COMPLETED FOR L102 PROCESSING COMPLETED FOR L109 PROCESSING COMPLETED FOR L122 21 DUP REM L88 L17 L19 L31 L28 L93 L97 L99 L101 L102... L133 DUPLICATES REMOVED)

> ANSWERS '1-11' FROM FILE HCAPLUS ANSWERS '12-14' FROM FILE CASREACT ANSWERS '15-18' FROM FILE CHEMINFORMRX ANSWERS '19-20' FROM FILE BABS

### ANSWER '21' FROM FILE CAOLD

=> file stnguide FILE 'STNGUIDE' ENTERED AT 09:09:29 ON 13 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Apr 6, 2007 (20070406/UP).

=> d ibib ed ab hitind hitstr
YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' CONTINUE? (Y)/N:y

L133 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2 ACCESSION NUMBER: 2003:613306 HCAPLUS Full-text DOCUMENT NUMBER: 140:111018 TITLE: Stereospecific Grignard reactions of cholesteryl 1-alkenesulfinate esters: Application of the Andersen protocol to the preparation of non-racemic  $\alpha$ ,  $\beta$ -unsaturated sulfoxides Strickler, Rick R.; Motto, John M.; Humber, Craig C.; AUTHOR(S): Schwan, Adrian L. Guelph-Waterloo Centre for Graduate Work in Chemistry CORPORATE SOURCE: and Biochemistry, Department of Chemistry and Biochemistry, University of Guelph, Guelph, ON, N1G 2W1, Can. SOURCE: Canadian Journal of Chemistry (2003), 81(6), 423-430 CODEN: CJCHAG; ISSN: 0008-4042 PUBLISHER: National Research Council of Canada DOCUMENT TYPE: Journal LANGUAGE: English CASREACT 140:111018 OTHER SOURCE(S): EDEntered STN: 11 Aug 2003 AΒ Enantiomerically enriched  $\alpha, \beta$ -unsatd. sulfinate esters of (-)-cholesterol undergo stereospecific substitutions at sulfur when treated with Grignard reagents. Sulfoxides, e.g., I, with enantiomeric excesses of 85-99.5% were obtained when enantiopure sulfinates were used. The substitution reactions proceed with inversion of sulfur configuration. Enantiomerically pure cholesteryl (E)-2- carbomethoxyethenesulfinate is not a suitable reactant under the Grignard reaction conditions. It is suggested that the ester group induces unwanted reactions significantly lowering both the yield and sulfur stereogenicity. 23-12 (Aliphatic Compounds) sulfinate ester unsatd cholesteryl stereoselective nucleophilic ST substitution Grignard; sulfoxide unsatd asym synthesis IT Asymmetric synthesis and induction (asym. synthesis of  $\alpha, \beta$ -unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl alkenesulfinates with Grignard reagents) IT Grignard reagents RL: RCT (Reactant); RACT (Reactant or reagent) (asym. synthesis of  $\alpha$ ,  $\beta$ -unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl alkenesulfinates with Grignard reagents) IT Sulfinic acids

DI - DCT /Deach

RL: RCT (Reactant); RACT (Reactant or reagent)

(esters; asym. synthesis of  $\alpha, \beta$ -unsatd. sulfoxides

via nucleophilic substitution of chiral cholesteryl alkenesulfinates with Grignard reagents)

IT Substitution reaction, nucleophilic

(stereoselective; asym. <u>synthesis</u> of  $\alpha, \beta$ -unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl alkenesulfinates with Grignard reagents)

IT Vinyl compounds, preparation

```
RL: SPN (Synthetic preparation); PREP (Preparation)
        (sulfoxides; asym. synthesis of \alpha, \beta-unsatd.
        sulfoxides via nucleophilic substitution of chiral cholesteryl
        alkenesulfinates with Grignard reagents)
IT
     Sulfoxides
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (vinyl; asym. synthesis of \alpha, \beta-unsatd. sulfoxides
        via nucleophilic substitution of chiral cholesteryl alkenesulfinates
        with Grignard reagents)
IT
     110-00-9, Furan
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (Grignard preparation; asym. synthesis of
        α, β-unsatd. sulfoxides via nucleophilic substitution of
        chiral cholesteryl alkenesulfinates with Grignard reagents)
IT
     147461-00-5P
     RL: BYP (Byproduct); PREP (Preparation)
        (asym. synthesis of \alpha, \beta-unsatd. sulfoxides via
        nucleophilic substitution of chiral cholesteryl alkenesulfinates with
        Grignard reagents)
IT
     677-22-5, tert-Butylmagnesium chloride
                                               693-04-9, Butylmagnesium chloride
     931-50-0, Cyclohexylmagnesium bromide
                                              931-51-1, Cyclohexylmagnesium
                1068-55-9, Isopropylmagnesium chloride
     chloride
                                                           1589-82-8,
                               4294-57-9, p-Tolylmagnesium bromide
     Benzylmagnesium bromide
     35293-35-7, 2-Methyl-2-phenylpropylmagnesium chloride
                                                               82297-89-0,
     4-Fluoro-3-methylphenylmagnesium bromide 216007-93-1
                                                               257276-58-7
                   335591-44-1
     257276-66-7
                                  335591-46-3
                                              335591-47-4 335591-49-6
     335591-50-9
                   646516-62-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (asym. synthesis of \alpha, \beta-unsatd. sulfoxides via
        nucleophilic substitution of chiral cholesteryl alkenesulfinates with
        Grignard reagents)
IT
     34553-13-4P
                   41103-85-9P
                                  54828-68-1P
                                                91874-30-5P
                                                               122833-94-7P
                                                                   257276-62-3P
     148091-66-1P
                    257276-59-8P
                                    257276-60-1P
                                                   257276-61-2P
     257276-63-4P
                    257276-64-5P
                                    257276-65-6P
                                                   646516-46-3P
                                                                   646516-47-4P
     646516-48-5P 646516-49-6P
                                    646516-50-9P
                                                   646516-51-0P
                                                                   646516-52-1P
     646516-53-2P 646516-54-3P 646516-55-4P
                                                 646516-56-5P
     646516-57-6P
                   646516-58-7P
                                    646516-59-8P
                                                  646516-60-1P
                                                                  646516-61-2P
     646516-63-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (asym. synthesis of \alpha, \beta-unsatd. sulfoxides via
        nucleophilic substitution of chiral cholesteryl alkenesulfinates with
        Grignard reagents)
IT
     216007-75-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (mechanistic studies; asym. synthesis of \alpha, \beta-
        unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl
        alkenesulfinates with Grignard reagents)
IT
     30749-71-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (mechanistic studies; asym. synthesis of \alpha, \beta-
        unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl
        alkenesulfinates with Grignard reagents)
     100-39-0, Benzyl bromide
ĮΤ
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (sulfenate trapping agent; asym. synthesis of
        \alpha, \beta-unsatd. sulfoxides via nucleophilic substitution of
        chiral cholesteryl alkenesulfinates with Grignard reagents)
IT
     646516-55-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
```

(asym.  $\underline{\text{synthesis}}$  of  $\alpha$ ,  $\beta$ -unsatd. sulfoxides via nucleophilic substitution of chiral cholesteryl alkenesulfinates with Grignard reagents)

646516-55-4 HCAPLUS RN

Benzene, [[(S)-[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX CN

Absolute stereochemistry. Rotation (-). Double bond geometry as shown.

$$Ph \xrightarrow{E} S \xrightarrow{O} Ph$$

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib ed ab hitind hitstr 2-11 YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' -CONTINUE? (Y) /N: y

L133 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2001:334964 HCAPLUS Full-text

DOCUMENT NUMBER:

135:122252

TITLE:

Simple and stereoselective synthetic route to

(E)-1-alkenyl sulfoxides via terminal alkynes

AUTHOR(S):

Zhong, Ping; Guo, Meng-Ping; Huang, Xian

CORPORATE SOURCE:

Department of Chemistry, Yichun Normal Institute,

Yichun, 336000, Peop. Rep. China

SOURCE:

Journal of Chemical Research, Synopses (2000

), (12), 588-589

CODEN: JRPSDC; ISSN: 0308-2342

PUBLISHER:

Science Reviews Ltd.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 135:122252

Entered STN: 11 May 2001

- Terminal alkynes **react** with Cp2Zr(H)Cl (Cp =  $\eta$ 5-C5H5) to give AB organozirconium(IV) complexes, which are trapped with sulfinyl chlorides to afford (E)-1-alkenyl sulfoxides.
- CC 25-12 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
- alkenyl sulfoxide stereoselective prepn; alkyne reaction STzirconocene chloride sulfinyl chloride

Stereoselective synthesis ΙT

(of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT Alkynes

> RL: RCT (Reactant); RACT (Reactant or reagent) (stereoselective preparation of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT Sulfoxides

RL: SPN (Synthetic preparation); PREP (Preparation) (stereoselective preparation of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT 536-74-3, Phenylacetylene 628-71-7, 1-Heptyne 693-02-7, 1-Hexyne 4972-29-6, Benzenesulfinyl chloride 10439-23-3, 4-Methylbenzenesulfinyl chloride 37342-97-5, Zirconocene chloride hydride 41719-05-5, Benzenemethanesulfinyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)
(stereoselective <u>preparation</u> of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT 40110-66-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(stereoselective  $\underline{\text{preparation}}$  of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT 56246-14-1P 66967-41-7P 98750-73-3P 138286-20-1P 160426-22-2P 257904-70-4P 350826-92-5P

RL: SPN (Synthetic preparation); PREP (Preparation) (stereoselective preparation of (E)-1-alkenyl sulfoxides via terminal alkynes)

IT 160426-22-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (stereoselective preparation of (E)-1-alkenyl sulfoxides via terminal alkynes)

RN 160426-22-2 HCAPLUS

CN Benzene, [[[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$Ph \xrightarrow{E} \bigcup_{h=1}^{O} Ph$$

THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 14 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L133 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4 ACCESSION NUMBER: 1998:651752 HCAPLUS Full-text DOCUMENT NUMBER: 130:13631 TITLE: 1-Alkenesulfinyl Chlorides: Synthesis, Characterization, and Some Substitution Reactions Schwan, Adrian L.; Strickler, Rick R.; Lear, Yvonne; AUTHOR(S): Kalin, Mark L.; Rietveld, Tanya E.; Xiang, Ting-Jian; Brillon, Denis Guelph-Waterloo Centre for Graduate Work in Chemistry CORPORATE SOURCE: and Biochemistry Department of Chemistry and Biochemistry, University of Guelph, Guelph, ON, N1G 2W1, Can. SOURCE: Journal of Organic Chemistry (1998), 63(22), 7825-7832 CODEN: JOCEAH; ISSN: 0022-3263 PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 130:13631 Entered STN: 15 Oct 1998 ΑB A number of 1-alkenyl sulfoxides bearing either a diphenylmethyl (DPM) or a pmethoxybenzyl (PMB) group have been prepared and exposed to the chlorine surrogate SO2Cl2. Through an oxidative fragmentation reactions, a new family of sulfur acid derivs., 1-alkenesulfinyl chlorides, is generated. They can be characterized by IR spectroscopy before chemical capture with an alc. Ethenesulfinyl chloride and 1-propenesulfinyl chloride, obtained from their corresponding DPM precursor, can be distilled at reduced pressure to afford ca. 90% pure material. NMR chemical shift comparison of various 1alkenesulfinyl-containing compds. is made. 1-Alkenesulfinylmethyl phenyl (alkyl) ketones can be prepared directly from 1-alkenesulfinyl chlorides although decomposition and/or isomerization is sometimes extensive during purification CC 21-2 (General Organic Chemistry) STalkenesulfinyl chloride prepn reaction; oxidative fragmentation alkenyl sulfoxide; sulfinate ester prepn IT Fragmentation reactions (preparation of alkenesulfinyl chlorides by oxidative fragmentation of alkenyl sulfoxides) IT Sulfoxides RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of alkenesulfinyl chlorides by oxidative fragmentation of alkenyl sulfoxides) IT Halides RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (sulfinyl chlorides; preparation of alkenesulfinyl chlorides by oxidative fragmentation of alkenyl sulfoxides) 91-01-0, Benzhydrol 104-93-8, p-Methoxytoluene IT 108-93-0, Cyclohexanol, reactions p-Methoxybenzyl alcohol 122-97-4, 3-Phenylpropanol 536-74-3, Phenylacetylene 3,3-Dimethyl-1-butene 776-74-9, Diphenylmethyl bromide 922-67-8, Methyl propiolate 1833-53-0 6258-60-2 6651-36-1 7117-41-1

24281-06-9

156598-22-0

24281-04-7

(preparation and reactions of alkenesulfinyl chlorides) 2245-30-9P 2746-25-0P, p-Methoxybenzyl bromide 4237-48-3P,

24281-03-6

RL: RCT (Reactant); RACT (Reactant or reagent)

13735-81-4

ΙT

Diphenylmethanethiol 35378-93-9P 45434-29-5P 77481-43-7P 94001-59-9P 176907-85-0P 176907-89-4P 176907-90-7P 176907-91-8P 176907-95-2P 176907-96-3P 216007-60-2P 216007-61-3P 216007-62-4P 216007-65-7P **216007-66-8P** 216007-63-5P 216007-64-6P 216007-70-4P **216007-71-5P** 216007-67-9P 216007-69-1P 216007-74-8P 216007-75-9P 216007-72-6P **216007-73-7P** 216007-76-0P, Ethenesulfinyl chloride 216007-77-1P 216007-78-2P 216007-79-3P 216007-80-6P, 1-Cyclohexene-1-sulfinyl chloride 216007-83-9P 216007-84-0P 216007-85-1P 216007-81-7P 216007-82-8P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and reactions of alkenesulfinyl chlorides) 176907-97-4P 176908-01-3P 176908-02-4P 216007-86-2P 216007-87-3P

IT 176907-97-4P 176908-01-3P 176908-02-4P 216007-86-2P 216007-87-3P 216007-88-4P 216007-89-5P 216007-90-8P 216007-91-9P 216007-92-0P 216007-93-1P 216007-94-2P 216007-95-3P 216007-96-4P 216007-97-5P 216007-98-6P 216007-99-7P 216008-00-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and reactions of alkenesulfinyl chlorides)

IT 216007-66-8P 216007-67-9P 216007-71-5P 216007-73-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reactions of alkenesulfinyl chlorides)

RN 216007-66-8 HCAPLUS

CN Benzene, 1,1'-[[[(1E)-2-phenylethenyl]sulfinyl]methylene]bis- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 216007-67-9 HCAPLUS

CN Benzene, 1-methoxy-4-[[[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA
INDEX NAME)

Double bond geometry as shown.

RN 216007-71-5 HCAPLUS

CN Benzene, 1,1'-[[[(1Z)-2-phenylethenyl]sulfinyl]methylene]bis- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 216007-73-7 HCAPLUS

CN Benzene, 1-methoxy-4-[[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L133 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 5 ACCESSION NUMBER: 1996:213412 HCAPLUS Full-text DOCUMENT NUMBER: 124:342597 TITLE: Oxidative fragmentations of selected 1-alkenyl sulfoxides. Chemical and spectroscopic evidence for 1-alkenesulfinyl chlorides Schwan, Adrian L.; Kalin, Mark L.; Vajda, Kristin E.; AUTHOR(S): Xiang, Ting-Jian; Brillon, Denis CORPORATE SOURCE: Guelph-Waterloo Cent. Grad. Work Chem., Univ. Guelph, Guelph, ON, N1G 2W1, Can. Tetrahedron Letters (1996), 37(14), 2345-8 SOURCE: CODEN: TELEAY; ISSN: 0040-4039 PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English OTHER SOURCE(S): CASREACT 124:342597 ED Entered STN: 13 Apr 1996 A collection of 1-alkenyl sulfoxides possessing diphenylmethyl, pmethoxybenzyl or 2-(trimethylsilyl)ethyl groups, e.g., RCH2CC1:C(CH2R)S(O)(CH2)2SiMe3 (R = Me, OAc), can be converted to 1alkenesulfinyl chlorides using SO2Cl2. The 1-alkenesulfinyl chlorides were spectroscopically characterized by IR and were chemical captured as their cyclohexyl or 3-phenylpropyl 1-alkenesulfinate esters. CC 23-11 (Aliphatic Compounds) 108-93-0, Cyclohexanol, reactions 122-97-4, 3-Phenylpropanol IT 142-29-0, Cyclopentene 536-74-3, Phenylacetylene 754-05-2, Vinyl 928-49-4, 3-Hexyne 1573-17-7, trimethylsilane 776-74-9 1,4-Diacetoxy-2-butyne 2746-25-0 21466-62-6, Phenylthiirane S-oxide 156090-91-4, 2-(Trimethylsilyl) ethanesulfenyl chloride 176907-85-0 176907-87-2 **176907-88-3** 176907-86-1 176907-89-4 176907-90-7 176907-91-8 176907-92-9 176907-93-0 176907-94-1 176907-95-2 176907-96-3 RL: RCT (Reactant); RACT (Reactant or reagent) (substitution of alkenyl sulfoxides via sulfinyl chlorides) IT 176907-88-3 176907-94-1 RL: RCT (Reactant); RACT (Reactant or reagent). (substitution of alkenyl sulfoxides via sulfinyl chlorides)

0 Ph2CH—S—CH——CH—Ph

NAME)

176907-88-3 HCAPLUS

RN

CN

RN 176907-94-1 HCAPLUS
CN Benzene, 1-methoxy-4-[[(2-phenylethenyl)sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Benzene, 1,1'-[[(2-phenylethenyl)sulfinyl]methylene]bis- (9CI) (CA INDEX

```
CH2-S-CH-Ph
```

```
L133 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 6
                         1990:631146 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         113:231146
                         Synthesis and properties of substituted
TITLE:
                         \alpha'-lithiated \alpha(Z),\gamma-dienyl
                         sulfoxides. Part II. Stereochemical studies on
                         products obtained by cyclization of \alpha'-lithiated
                         \alpha(Z),\gamma-dienyl sulfide, sulfoxide, and
                         sulfone
AUTHOR(S):
                         Reglier, M.; Julia, S. A.
CORPORATE SOURCE:
                        Fac. Sci. Saint-Jerome, Univ. Aix-Marseille III,
                         Marseille, 13397, Fr.
SOURCE:
                         Bulletin de la Societe Chimique de France (
                         1990), (March-April), 236-44
                         CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          French
                         CASREACT 113:231146
OTHER SOURCE(S):
ED
     Entered STN: 22 Dec 1990
AB
     The lithio derivative of sulfide I was prepared and gave after protonation the
     two compds. trans-II (45%) and cis-III (15%). In the same way, the
      corresponding sulfoxide and sulfone were converted stereospecifically into the
      anti, cis (68%) and cis (61%) compds., resp. For each of the three lithio
     derivs., the possible transition states were examined
     27-13 (Heterocyclic Compounds (One Hetero Atom))
CC
                   99834-21-6P
TT
     99834-14-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
         (preparation and oxidn of)
IT
     100483-88-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
         (preparation and oxidation of)
IT
     100420-66-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
         (preparation and reduction of)
     99834-11-4P 100420-61-9P
ΙT
                                 130629-39-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation and sequential lithiation and cyclization of)
IT
     99834-15-8P 100420-70-0P
                                 100420-78-8P
                                                130629-40-2P
     130629-41-3P 130629-42-4P
                                    130629-43-5P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
     100-53-8, Benzenemethanethiol
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with cyclohexenylacetylene)
IT
     931-49-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (reaction of, with toluenethiol)
```

IT 100420-61-9P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and sequential lithiation and cyclization of)

RN 100420-61-9 HCAPLUS

Benzene, [[[2-(1-cyclohexen-1-yl)ethenyl]sulfinyl]methyl]-, (Z)- (9CI) CN (CA INDEX NAME)

Double bond geometry as shown.

IT 100420-70-0P

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

100420-70-0 HCAPLUS RN

CN Benzene, [[[2-(1-cyclohexen-1-yl)ethenyl]sulfinyl]methyl]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L133 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 7

ACCESSION NUMBER:

1986:88389 HCAPLUS Full-text

DOCUMENT NUMBER:

104:88389

TITLE:

Stereospecific cyclizations of substituted

 $\alpha'$ -lithiated  $\alpha(Z)$ ,  $\gamma$ -butadienyl

sulfoxides

AUTHOR(S):

Reglier, Marius; Julia, Sylvestre A.

CORPORATE SOURCE:

Lab. Chim., Ec. Norm. Super., Paris, 75231, Fr.

SOURCE: Tetrahedron Letters (1985), 26(22), 2655-8

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 104:88389

ED Entered STN: 22 Mar 1986

The title compds. I [R = Ph, Me2C:CH, R1 = H, R2 = Me; R = Ph, R1R2 = (CH2)4]AB were prepared and converted stereospecifically to the lithiated cyclic sulfoxides I through a concerted disrotatory electrocyclization.

CC 27-15 (Heterocyclic Compounds (One Hetero Atom))

IT Cyclocondensation reaction

> (stereoselective, of lithiated butadienyl sulfoxides, lithiated dihydrothiopyran oxides from)

100420-58-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and lithiation of)

IT 100420-59-5P 100420-60-8P 100420-61-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and lithiation-stereoselective cyclization of)

IT 100420-65-3P 100420-66-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and oxidation and reduction of)

IT 100420-64-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and oxidation of)

IT 99834-14-7P 100420-62-0P 100420-63-1P 100420-67-5P 100420-68-6P

100420-69-7P **100420-70-0P** 100420-71-1P 100420-72-2P

100420-73-3P 100420-74-4P 100420-75-5P 100420-76-6P 100420-77-7P

100420-78-8P 100440-52-6P 100440-53-7P 100483-86-1P 100483-87-2P

100483-88-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

IT 100420-61-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and lithiation-stereoselective cyclization of)

RN 100420-61-9 HCAPLUS

CN Benzene, [[[2-(1-cyclohexen-1-yl)ethenyl]sulfinyl]methyl]-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\mathbb{Z}$$
  $\mathbb{P}^{h}$ 

#### IT 100420-70-0P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 100420-70-0 HCAPLUS

CN Benzene, [[[2-(1-cyclohexen-1-yl)ethenyl]sulfinyl]methyl]-, (E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L133 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 8

ACCESSION NUMBER: 1984:67936 HCAPLUS Full-text

DOCUMENT NUMBER: 100:67936

```
Sodium bromite: a new selective reagent for the
TITLE:
                         oxidation of sulfides and alcohols
AUTHOR(S):
                         Kageyama, Toshifumi; Ueno, Yoshio; Okawara, Makoto
                         Fac. Eng., Kanto Gakuin Univ., Yokohama, 236, Japan
CORPORATE SOURCE:
SOURCE:
                         Synthesis (1983), (10), 815-16
                         CODEN: SYNTBF; ISSN: 0039-7881
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                         English
                         CASREACT 100:67936
OTHER SOURCE(S):
     Entered STN: 12 May 1984
     Oxidation of 8 RSR1 (R = Ph, Bu, p-tolyl, styryl, 2-hydroxycyclohexanol, R1 =
AB
     Ph, Bu, PhCH2, p-tolyl, allyl, morpholino) with NaBrO2 in aqueous dioxane gave
     78-97% RS(O)R1. Similarly RCH(OH)R1 [R = Me, R1 = (CH2)4Me, HOCH2CH2; RR1 =
      (CH2)n, n = 4-6] gave 82-100% RCOR1.
CC
     25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
ST
     sodium bromite oxidizing agent; oxidn sulfide alc; ketone prepn
     oxidn alc; sulfoxide prepn oxidn sulfide
IT
     Alcohols, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (oxidation of, with sodium bromite, ketones from)
ΙT
     Sulfides, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (oxidation of, with sodium bromite, sulfoxides from)
IT
     Ketones, preparation
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of alcs. with sodium bromite)
ΙT
     Sulfoxides
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of sulfides with sodium bromite).
IT
     71-41-0, reactions
                         96-41-3 107-88-0
                                               108-93-0,
     reactions
                 502-41-0
                            543-49-7
                                       1490-04-6
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (oxidation of, with sodium bromite, ketones from)
IT
     109-52-4P, preparation
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of pentanol with bromine)
IT
     2173-56-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of pentanol with sodium bromite)
                              110-43-0P
                                          120-92-3P 502-42-1P
TТ
     108-94-1P, preparation
     590-90-9P
                 10458-14-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of the alc. with sodium bromite)
IT
     833-82-9P 945-51-7P
                            1774-35-2P
                                          2168-93-6P 16066-32-3P
     19093-37-9P
                   65117-26-2P 88584-31-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of the sulfide by sodium bromite)
IT
     88584-31-0P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, by oxidation of the sulfide by sodium bromite)
     88584-31-0 HCAPLUS
RN
     Benzene, [[(2-phenylethenyl)sulfinyl]methyl]- (9CI) (CA INDEX NAME)
CN
```

Ph-CH<sub>2</sub>-S-CH-Ph

L133 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 9

ACCESSION NUMBER:

1963:428075 HCAPLUS Full-text

DOCUMENT NUMBER:

59:28075

ORIGINAL REFERENCE NO.: 59:5004b-c

TITLE:

Transfer reactions involving boron. III.

Hydroboration studies with enethiol ethers

AUTHOR(S):

Pasto, D. J.; Miesel, J. L.

CORPORATE SOURCE: SOURCE:

Univ. of Notre Dame, Notre Dame, IN

J. Am. Soc. Soc. (1963), 85(14), 2118-24

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

Entered STN: 22 Apr 2001

AΒ cf. CA 58, 12444a. A new rearrangement reaction of unstable substituted organoboranes is reported. Hydroboration of enethiol ethers gives both possible substituted organoboranes in which H and C undergo an intermol. transfer from B to C with the sulfur residue migrating from C to B. The reactions are proposed to proceed via fourcentered transition states.

CC 32 (Physical Organic Chemistry)

IT 32093-01-9P, Sulfone, benzyl styryl, trans- 32291-81-9P, Sulfone, benzyl styryl, cis-93902-69-3P, 2-Hexanone, 3,4-diphenyl- **852284-93-6P** , Sulfoxide, benzyl styryl, cis-

RL: PREP (Preparation)

(preparation of)

ΙT 852284-93-6P, Sulfoxide, benzyl styryl, cis-

RL: PREP (Preparation)

(preparation of)

852284-93-6 HCAPLUS RN

CN Benzene, [[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L133 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 10

ACCESSION NUMBER:

1963:428074 HCAPLUS Full-text

DOCUMENT NUMBER:

59:28074

ORIGINAL REFERENCE NO.: 59:5003g-h,5004a-b

TITLE:

Intermolecular transfer of the 2,4,6-trinitrophenyl

group bound to amino radicals

AUTHOR(S):

Tanaka, Masaru; Tsuzukida, Yasuharu; Satake, Kazuo

CORPORATE SOURCE:

Tokyo Metropolitan Univ.

SOURCE:

Nippon Kagaku Zasshi (1962), (83), 895-901

-CODEN: NPKZAZ; ISSN: 0369-5387

DOCUMENT TYPE:

Journal

LANGUAGE:

Unavailable

ED Entered STN: 22 Apr 2001

AB Transferability of the picryl (TNP) group in picramide (I) and its derivs. was studied especially with amino acids. Analyses of the starting material and the product were carried out by electronic absorption spectra or by paper chromatography followed by densitometry. TNPamino acids (20 mol.) were treated with 20 ml. 15N NH3; TNP-proline (II) was the most reactive. TNPglycine and TNP-glycylpeptide also react rapidly but no I was detected. Other TNP-amino acids give almost quant. I, but the reaction velocity depends on the

steric effect of the  $\alpha$ -substituent. TNP-peptides react similarly. TNP group at the  $\alpha$ -position of lysine is more rapidly transferrd than that at  $\epsilon$ position. When there is a primary CH, COa2H, or p-C6H4OH group  $\beta$  to the TNP-Ngroup, the reaction is slow, but the products are normal. Effect of concentration of NH3 on the transfer was studied with TNP-glutamic acid (III). If the concentration is »IN, the reaction rate is not much affected, although more concentrated solution gives faster reaction. The reaction rate also depends on pH, the critical pH being 11.7. The reaction is complete within several min. at 100° and is faster when EtOH is present. Reaction between alkylamines and III produces only alkylpicramide (IV) and glutamic acid. Reaction between I and Me2NH (V) gives no N,N-dimethylpicramide (VI). IV and NH3 give I easily but V gives unidentified material. VI and NH3 react smoothly but reaction between I and alkylamine is slow, especially when the alkyl chain is long. II and V do not react but proline and VI react to produce a little II. Thus it is concluded that, as TNP-donor, the ability is I «IV « VI and that, as acceptor, the ability is NH3 » primary amine » secondary amine.

CC 32 (Physical Organic Chemistry)

IT Reaction kinetics and (or) Velocity

(of ammonolysis of N-picryl amino acids)

IT Amines

(reactions of, with N-picryl amino acids)

IT 838-67-5P, Benzyl alcohol,  $\alpha$ -[(benzylthio)methyl]- 2157-59-7P, Sulfide,  $\alpha$ -ethylbenzyl phenyl 32093-01-9P, Sulfone, benzyl styryl, trans- 32291-81-9P, Sulfone, benzyl styryl, cis- 87413-33-0P, Sulfone,  $\alpha$ -ethylbenzyl phenyl 93902-69-3P, 2-Hexanone, 3,4-diphenyl- 94264-79-6P, Phenethyl alcohol,  $\beta$ -( $\alpha$ -ethylbenzyl)- $\alpha$ - methyl- 95126-90-2P, Sulfoxide,  $\alpha$ -ethylbenzyl phenyl

852284-93-6P, Sulfoxide, benzyl styryl, cis-

RL: PREP (Preparation)

(preparation of)

IT 7664-41-7, Ammonia

(reaction with N-picryl amino acids)

IT <u>852284-93-6P</u>, Sulfoxide, benzyl styryl, cis-

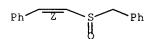
RL: PREP (Preparation)

(preparation of)

RN 852284-93-6 HCAPLUS

CN Benzene, [[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



L133 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2000:414144 HCAPLUS Full-text

DOCUMENT NUMBER:

133:192741

TITLE:

The reaction of thiirane S-oxides with

methyllithium lithium bromide complex. A surprising preference for deprotonation over desulfurization

AUTHOR(S): Schwan, Adrian L.; Lear, Yvonne

CORPORATE SOURCE:

Guelph-Waterloo Centre for Graduate Work in Chemistry

and Biochemistry, Department of Chemistry and

Biochemistry, University of Guelph, Guelph, ON, N1G

2W1, Can.

SOURCE:

Sulfur Letters (2000), 23(3), 111-119

CODEN: SULED2; ISSN: 0278-6117

PUBLISHER:

LANGUAGE:

Harwood Academic Publishers

DOCUMENT TYPE:

Journal English

ED Entered STN: 22 Jun 2000

- AB Selected organolithium reagents demonstrate a surprising preference for deprotonation of thiirane S-oxides over other modes of attack including desulfurization. The MeLi·LiBr complex in particular was shown to generate (E)-1-alkenesulfenate anions in 50-75% yield via an initial deprotonation reaction of alkyl substituted thiirane S-oxides. These results are comparable to the established deprotonation reaction using disilazide bases, but lead to cleaner reaction mixts.
- CC 21-2 (General Organic Chemistry)
- ST thiirane oxide deprotonation lithium bromide methyllithium; alkenylsulfinylmethyl benzene **prepn**; sulfine alkenyl

# prepn

IT Deprotonation

(<u>preparation</u> of [(alkenylsulfinyl)methyl]benzene derivs. by deprotonation of thiirane oxides with methyllithium-lithium bromide complex)

IT Organic compounds, preparation

RL: SPN (Synthetic preparation); PREP (Preparation) (sulfines; preparation of [(alkenylsulfinyl)methyl]benzene derivs. by deprotonation of thiirane oxides with methyllithium-lithium bromide complex)

IT 100-42-5P, preparation

complex)

RL: BYP (Byproduct); PREP (Preparation) (preparation of)

IT 289507-41-1P 289507-43-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)

IT 917-54-4, Methyllithium 7550-35-8, Lithium bromide
RL: NUU (Other use, unclassified); USES (Uses)
(preparation of [(alkenylsulfinyl)methyl]benzene derivs. by deprotonation of thiirane oxides with methyllithium-lithium bromide

IT 100-39-0, Benzyl bromide 7117-41-1, Thiirane 1-oxide 21386-27-6, Methylthiirane 1-oxide 21386-28-7, 7-Thiabicyclo[4.1.0]heptane 7-oxide 21466-62-6, Phenylthiirane 1-oxide 202071-56-5 202071-67-8, Triethyl(1-oxidothiiranyl)silane 289507-40-0, (1,1-Dimethylethyl)thiirane 1-oxide

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of [(alkenylsulfinyl)methyl]benzene derivs. by
deprotonation of thiirane oxides with methyllithium-lithium bromide
complex)

TT 73927-19-2P, [(Ethenylsulfinyl)methyl]benzene 152459-50-2P, [(1-Cyclohexen-1-yl)sulfinyl]methyl]benzene 160426-22-2P, [(E)-(2-Phenylethenyl)sulfinyl]methyl]benzene 160426-23-3P, [[(1-Phenylethenyl)sulfinyl]methyl]benzene 160426-29-9P, Triethyl[1-[(phenylmethyl)sulfinyl]ethenyl]silane 160426-30-2P 289507-42-2P, [(1E)-(1-Propenylsulfinyl)methyl]benzene 289507-44-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of [(alkenylsulfinyl)methyl]benzene derivs. by deprotonation of thiirane oxides with methyllithium-lithium bromide complex)

IT 160426-22-2P, [[(E)-(2-Phenylethenyl)sulfinyl]methyl]benzene RL: SPN (Synthetic preparation); PREP (Preparation)

(<u>preparation</u> of [(alkenylsulfinyl)methyl]benzene derivs. by deprotonation of thiirane oxides with methyllithium-lithium bromide complex)

RN 160426-22-2 HCAPLUS

CN Benzene, [[[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$E$$
 $E$ 
 $E$ 
 $Ph$ 

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L133 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1995:283696 HCAPLUS Full-text

DOCUMENT NUMBER:

NUMBER: 122:80624

TITLE:

Theoretical and Experimental Analyses of the

Deprotonation of Thiirane S-Oxides: The

Stereoselective Formation of trans-Alkyl- and

gem-Silylethenesulfenate Anions

AUTHOR(S): Refvik, Mitchell D.; Froese, Robert D. J.; Goddard,

John D.; Pham, Hung H.; Pippert, Mark F.; Schwan,

Adrian L.

CORPORATE SOURCE: Guelph-Waterloo Centre for Graduate Work in Chemistry,

University of Guelph, Guelph, ON, N1G 2W1, Can. Journal of the American Chemical Society (1995

SOURCE: Journal of the American C ), 117(1), 184-92

CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal English

LANGUAGE: Engli ED Entered STN: 10 Jan 1995

AB Exptl. and theor. studies of the regioselective deprotonation of thiirane S-oxides are reported. Exptl. under the reaction conditions of LiHMDS/THF/-78° with anti-alkylthiirane S-oxides or anti-silylthiirane S-oxides as starting materials, the products of ring opening are (E)-2-alkylethenesulfenate and 1-silylethenesulfenate anions, resp. Expts. involving deuterium labeling clearly indicate that a regioselective deprotonation reaction was followed by a stereoselective ring opening. Ab initio methods at both the Hartree-Fock and Moeller-Plesset perturbation theory levels with the 6-31+G(d) basis set were used to exam. both lithiated methyl- and silylthiirane S-oxides. Of the possible anti-substituted species, the coordination of the lithium anti to the Me and gem to the silyl is predicted to be the most stable. These stable intermediates with the lithium syn to the sulfoxide could open to yield the exptl. observed products.

CC 22-12 (Physical Organic Chemistry) Section cross-reference(s): 29

IT Protonation and Proton transfer reaction

(deprotonation, regioselective, exptl. and theor. study of

deprotonation and ring cleavage of thiirane oxides)

IT 73927-19-2P 152459-44-4P 152459-46-6P 152459-47-7P 152459-48-8P 152459-49-9P 152459-50-2P 152459-51-3P 152459-52-4P 160426-15-3P 160426-17-5P 160426-18-6P 160426-19-7P 160426-20-0P 160426-21-1P

**160426-22-2P** 160426-23-3P 160426-29-9P 160426-30-2P

160426-31-3P 160426-32-4P 160426-33-5P 160426-34-6P 160426-35-7P

160426-36-8P 160426-39-1P 160426-40-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

IT 160426-22-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 160426-22-2 HCAPLUS

CN Benzene, [[[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

=> d ibib ab fhit 12
YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' CONTINUE? (Y)/N:y

L133 ANSWER 12 OF 21 CASREACT COPYRIGHT 2007 ACS on STN DUPLICATE 1

ACCESSION NUMBER:

143:1247 CASREACT Full-text

TITLE:

 $\alpha, \beta$ -Unsaturated sulfoxides for treating

proliferative disorders and as radioprotective and

chemoprotective agents

INVENTOR(S):

Reddy, Premkumar E.; Reddy, Ramana M. V.; Bell,

Stanley C.

PATENT ASSIGNEE(S):

Temple University-of the Commonwealth System of Higher

Education, USA; Onconova Therapeutics Inc.

SOURCE:

PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.			KII	ND	DATE APPLICATION NO. DATE												
WO 2005046599 A2 2				2005	20050526 WO 2004-US37293 20041108												
WO	2005	0465	99	A.	3	2005	1006										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	, RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	TG												
ΑU	2004	2892	81	Α	1	2005	0526		A	U 20	04-2	8928	1	2004	1108		

CA 2546495	<b>A</b> 1	20050526	CA	2004-2546495	20041108
EP 1689706	A2	20060816	EP	2004-816944	20041108
R: AT, BE,	CH, LI	, CY, BG, CZ			
US 2006280746	<b>A</b> 1	20061214	US	2006-574993	20060406
PRIORITY APPLN. INFO	.:		US	2003-520523P	20031114
		•	WO	2004-US37293	20041108

OTHER SOURCE(S): MARPAT 143:1247

AB  $\alpha\beta$ -Unsatd. sulfoxides Ar1[CH(R1)]nS(O)CH=CHAr2 [Ar1, Ar2 = (un)substituted (hetero)aryl (when Ar1 and Ar2 are both Ph, at least one of Ar1 and Ar2 is substituted); n = o, 1; R1 = H, C1-8 hydrocarbyl, CN, etc.; conformation of substituents on carbon-carbon double bond is E or Z; conformation of substituents on sulfoxide S atom is R-, S- or any mixture of R- and S-; when R1 other than H, conformation of substituents on carbon atom to which R1 is attached is R-, S- or any mixture of R- and S-] are disclosed which are useful as antiproliferative agents including e.g. anticancer agents and as radioprotective and chemoprotective agents. Processes or preg. compds. of the invention are also disclosed.

$$RX(2)$$
 OF 15 ...**F** + **G** ===> H

HO S CO<sub>2</sub>H MeO OMe 
$$(2)$$
  $(2)$ 

RX(2) RCT F 852285-79-1, G 830-79-5
PRO H 852283-22-8
CAT 110-89-4 Piperidine, 65-85-0 BzOH
SOL 108-88-3 PhMe
CON SUBSTAGE(1) 25 deg C
SUBSTAGE(2) 25 deg C -> reflux
SUBSTAGE(3) 6 hours, reflux
SUBSTAGE(4) reflux -> 25 deg C
NTE stereoselective, Knoevenagel reaction

=> d ibib ab fhit 13-14 YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' - ' CONTINUE? (Y)/N:y

L133 ANSWER 13 OF 21 CASREACT COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

139:374247 CASREACT Full-text

TITLE:

Structure-activity relationships of

2-(benzothiazolylthio)acetamide class of CCR3

selective antagonist

AUTHOR(S):

Naya, Akira; Kobayashi, Kensuke; Ishikawa, Makoto; Ohwaki, Kenji; Saeki, Toshihiko; Noguchi, Kazuhito;

Ohtake, Norikazu

CORPORATE SOURCE:

Banyu Tsukuba Research Institute, Ibaraki, 300-2611,

Japan

SOURCE:

Chemical & Pharmaceutical Bulletin (2003), 51(6),

697-701

CODEN: CPBTAL; ISSN: 0009-2363

Pharmaceutical Society of Japan

DOCUMENT TYPE:

Journal English

PUBLISHER: LANGUAGE:

The structure activity relationships of novel selective CCR3 receptor antagonists, 2-(benzothiazolylthio)acetamide derivs. were described. A lead structure (1a) was discovered from the screening of the focused library that was based on the structure of our dual antagonists for the human CCR1 and CCR3 receptors. Derivatization of la including incorporation of substituent(s) into each benzene ring of the benzothiazole and piperidine side chain resulted in the identification of potent and selective compds. (1b,r,s) exhibiting nano-molar binding affinity (IC50s: 1.5-3.0 nM) and greater than 800-fold selectivity for the CCR3 receptor over the CCR1 receptor.

RX(93) OF 163 COMPOSED OF REACTION SEQUENCE RX(24), RX(6) AND REACTION SEQUENCE RX(29), RX(21), RX(6)

START NEXT REACTION SEQUENCE

RX(24) RCT BF 6295-57-4
RGT BG 37222-66-5 Oxone
PRO R 625080-87-7
SOL 109-99-9 THF, 7732-18-5 Water
CON SUBSTAGE(1) 0 deg C
SUBSTAGE(2) 4 hours, room temperature

RX(29) RCT BP 73874-95-0, J 6287-38-3 RGT D 56553-60-7 Na.(AcO)3BH PRO BC 328083-79-0 SOL 67-66-3 CHCl3 CON SUBSTAGE(1) room temperature SUBSTAGE(2) 20 hours, room temperature

RX(21) RCT BC 328083-79-0

STAGE(1)

RGT AY 7647-01-0 HCl

SOL 67-56-1 MeOH

CON 20 hours, room temperature

STAGE(2)

RGT AZ 1310-73-2 NaOH

SOL 7732-18-5 Water

CON room temperature, pH >7

PRO M 92539-28-1

RX(6) RCT R 625080-87-7, M 92539-28-1 RGT O 2592-95-2 1-Benzotriazolol, P 25952-53-8 EDAP PRO S 625080-84-4 SOL 67-66-3 CHC13

SUBSTAGE(1) room temperature

17

SUBSTAGE(2) 20 hours, room temperature

REFERENCE COUNT:

THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L133 ANSWER 14 OF 21 CASREACT COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

121:34787 CASREACT Full-text

TITLE:

Ligand exchange reaction of sulfoxides in organic synthesis: a novel method for generation of magnesium

enolates and its application to synthesis of

 $\alpha$ -halocarboxylic acid derivatives and

α-haloaldehydes

AUTHOR(S):

Satoh, Tsuyoshi; Kitoh, Yasushi; Ken-ichi Onda; Koji,

Takano; Koji, Yamakawa

CORPORATE SOURCE:

Fac. Pharm. Sci., Sci. Univ. Tokyo, Tokyo, 162, Japan

SOURCE:

Tetrahedron (1994), 50(17), 4957-72 CODEN: TETRAB; ISSN: 0040-4020

DOCUMENT TYPE:

Journal

LANGUAGE:

English A new method for synthesis of  $\alpha$ -halo(Cl, F) carboxylic acid derivs. and  $\alpha$ -AB

haloaldehydes is described.  $\alpha$ -Halo- $\alpha$ -sulfinyl carboxylic acids, esters, and  $\alpha$ -halo- $\alpha$ -sulfinyl aldehydes were easily prepared from aryl 1-haloalkyl sulfoxides and alkyl chloroformate and Et formate, resp., in good yields. Chloro- $\alpha$ -sulfinyl amides were synthesized from (p-tolylthio)acetic acid. Ligand exchange reaction of the sulfonyl group of these acids, esters, amides, and aldehydes with EtMgBr gave the magnesium enolates, which were treated with water to give  $\alpha$ -halocarboxylic acid derivs. and  $\alpha$ -chloroaldehydes in good The magnesium enolates from  $\alpha$ -chloro- $\alpha$ -sulfinyl acid derivs. were trapped with carbonyl compds. to give  $\alpha$ -halo- $\beta$ - hydroxy adducts, which were cyclized to  $\alpha,\beta$ -epoxy carboxylic acid derivs. Thermal elimination of the sulfinyl group in the  $\alpha$ -halo- $\alpha$ -sulfinyl acid derivs. and the  $\alpha$ -halo- $\alpha$ sulfinyl aldehydes gave  $\alpha$ -halo- $\alpha$ ,  $\beta$ -unsatd. carboxylic acid derivs. and  $\alpha$ -halo- $\alpha,\beta$ -unsatd. aldehydes in high yields.

RX(9) OF 148 Z ...Н

HO2C Ph

$$(9)$$

AA
YIELD 68%

RX (9) H 148586-45-2

STAGE (1)

RGT D 925-90-6 EtMgBr SOL 109-99-9 THF

STAGE (2)

RCT Z 100-52-7

STAGE(3)

RGT E 12125-02-9 NH4Cl, X 1310-73-2 NaOH SOL 7732-18-5 Water

STAGE (4)

RGT Y 7647-01-0 HCl SOL 7732-18-5 Water

PRO AA 25547-51-7

=> d bib ab fhit 15

YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' - CONTINUE? (Y)/N:y

L133 ANSWER 15 OF 21 CHEMINFORMRX COPYRIGHT 2007 FIZ CHEMIE on STN

AN 200647100 CHEMINFORMRX Full-text

TI Aryliododifluoromethylsulfides, Sulfoxides and Sulfones: The First Optically Active Compounds with Polyfluoroalkyliodo Groups.

AU YAGUPOLSKII, L. M.; MATSNEV, A. V.

CS Inst. Org. Chem., Natl. Acad. Sci. Ukr., Kiev 02094, Ukraine

SO Mendeleev Commun.(3), 132-134 (2006) CODEN: MENCEX ISSN: 0959-9436

LA English

AB A new method for the synthesis of compounds with the difluoromethyliodide group directly connected to sulfide or sulfonyl groups is reported. Sulfoxides (II) and (VII) with difluoroiodomethyl and difluoromethyl groups bound to sulfur, resp., and their optically active forms are synthesized for the first time.

RX(18) OF 19 COMPOSED OF RX(3), RX(10)

RX(18) H + T ===> U

F k<sub>1</sub>

VI YIELD 60.0%

```
RX(3)
          RCT I, 884923
          RGT
               1275 (21908-53-2), HgO
               109 (7553-56-2), I2
          SOL
               55 (107-06-2), CH2C1-CH2C1
          PRO II, 1187783
              35.0 - 75.0 %
          YDS
          T.KW REFLUX
          KW
               halogenation; C-halogenation; iodination; alkylation
          NTE reaction: I -> II, example: 3
          RCT
RX(10)
               II, 1187783
               V, <u>10110</u> (104-87-0)
          RGT
               1184653, (Et2N) 2C=C(NEt2) 2
          PRO
               VI, 1187787
          YDS
               60.0 %
               -15.0 - 25.0 Cel
          KW
               addition; alkylation; C-alkylation
          NTE reaction:IIc (V) -> VI
```

=> d bib ab fhit 16-18

YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' - CONTINUE? (Y)/N:y

L133 ANSWER 16 OF 21 CHEMINFORMRX COPYRIGHT 2007 FIZ CHEMIE on STN

AN 200120073 CHEMINFORMRX Full-text

TI Simple and Stereoselective Synthetic Route to (E)-1-Alkenyl Sulfoxides via Terminal Alkynes.

AU ZHONG, P.; GUO, M.-P.; HUANG, X.

CS Dep. Chem., Zhejiang Univ., Hangzhou 310028, Peop. Rep. China

SO J. Chem. Res., Synop.(12), 588-589 (2000) CODEN: JRPSDC ISSN: 0308-2342

LA English

AB Hydrozirconation of terminal alkynes (I) and subsequent trapping of the organo-zirconium(IV) complexes formed with sulfuryl chlorides (II) results in the regio- and stereospecific formation of (E)-1- alkenyl sulfoxides (III) (7 examples). Vinyl sulfoxides (III) are valuable reagents in organic synthesis, e.g. the preparation of  $\alpha$ ,  $\beta$ -dichlorosulfides such as (IV).

RX(2) OF 6 A + F ===> G

$$C \stackrel{\text{CH}_{2}S(0)}{\longrightarrow} C1$$

$$I \qquad II \qquad (2)$$

```
RX (2)
          RCT
               I, 8427 (536-74-3)
               II, 807508
            STAGE(1)
               RGT 2375, ZrHCl(Cp)2
               SOL 206 (109-99-9), THF
                    25.0 Cel
               TIM 0.3 hr
            STAGE(2)
          PRO III, 80.7509
               74.0 %
          YDS
          KW
               addition; vinylation; alkylation; S-alkylation
               reaction: I 2.(II) -> III, example: 2
```

L133 ANSWER 17 OF 21 CHEMINFORMRX COPYRIGHT 2007 FIZ CHEMIE on STN

AN 199912049 CHEMINFORMRX Full-text

TI 1-Alkenesulfinyl Chlorides: Synthesis, Characterization, and Some Substitution Reactions.

AU SCHWAN, A. L.; STRICKLER, R. R.; LEAR, Y.; KALIN, M. L.; RIETVELD, T. E.; XIANG, T.-J.; BRILLON, D.

CS Guelph-Waterloo Cent. Grad. Work Chem., Dep. Chem. Biochem., Univ. Guelph, Guelph, Ont. N1G 2W1, Can.

SO J. Org. Chem., 63(22), 7825-7832 (1998) CODEN: JOCEAH ISSN: 0022-3263

LA English

Treatment of various alkenylsulfoxides bearing either a diphenylmethyl or a pmethoxybenzyl group with SO2C12 leads to the cleavage of the S-benzyl bond and
generation of a new family of sulfur acid derivatives, alkenesulfinyl
chlorides, which can be characterized by IR spectroscopy before chemical
capture with alcohols (II) and (IX). Chlorides (XIIIa) and (XIIIb) are
isolated after distillation at reduced pressure to afford ca. 90% pure
material. The preparation of derivatives of type (XV) from sulfinyl chlorides
is accompanied in some cases by decomposition and/or isomerization during
purification.

RX(5) OF 15 M + B ===> N

L133 ANSWER 18 OF 21 CHEMINFORMRX COPYRIGHT 2007 FIZ CHEMIE on STN

AN 199632098 CHEMINFORMRX Full-text

TI Oxidative Fragmentations of Selected 1-Alkenyl Sulfoxides. Chemical and Spectroscopic Evidence for 1-Alkenesulfinyl Chlorides.

AU SCHWAN, A. L.; KALIN, M. L.; VAJDA, K. E.; XIANG, T.-J.; BRILLON, D.

CS Dep. Chem. Biochem., Univ. Guelph, Guelph, Ont. N1G 2W1, Can.

SO Tetrahedron Lett., 37(14), 2345-2348 (1996) CODEN: TELEAY ISSN: 0040-4039

LA English

AB Upon treatment with sulfuryl chloride, a series of 1-alkenyl sulfoxides undergo oxidative cleavage of the C-S bond to give 1- alkenesulfinyl chlorides (cf. (IV)). These intermediates are characterized by IR spectroscopy and by chemical conversion to alkenesulfinate esters. In contrast, similar treatment of the sulfoxides (I) does not afford sulfinyl chlorides but produces  $\alpha$ ,  $\beta$ -dichlorinated products (II).

RX(13) OF 15 AA + P ===> AB

$$MeO$$

CH<sub>2</sub>  $\star$  S(O) CH<sub>=</sub>CH

VIII

(CH<sub>2</sub>) 30  $\star$  H

VIII

RX (13) RCT X, 478465 VIII, :9890 (122-97-4) STAGE(1) RGT 199 (7791-25-5), SO2Cl2 60 (75-09-2), CH2C12 SOL -78.0 - 25.0 Cel STAGE (2) RGT 768 (584-08-7), K2CO3 Т -78.0 - 25.0 Cel PRO XI, 478466 65.0 % YDS reaction:X 2.(VIII) -> XI, example: 2 NTE

=> d ibib ab 19-20 YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' -CONTINUE? (Y)/N:y

L133 ANSWER 19 OF 21 BABS COPYRIGHT 2007 BEILSTEIN MDL on STN

ACCESSION NUMBER:

6282045 BABS Full-text

TITLE:

Synthesis and characterization of homochiral

cholesteryl 1-alkenesulfinate esters

AUTHOR(S):

Strickler, Rick R.; Schwan, Adrian L.

SOURCE:

Tetrahedron: Asymmetry (2000), 11(24), 4843 - 4852

CODEN: TASYE3

DOCUMENT TYPE:

Journal English

LANGUAGE: SUMMARY LANGUAGE: English

A number of \$a,\$b-unsaturated sulfinyl chlorides 1 has been separately AB prepared and treated with (-)-cholesterol under various conditions some of which incorporated chiral amines quinine or quinidine. Some (R&s%) vinylic sulfinates could be isolated in enantiopure form following one or two recrystallizations of the resulting diastereomeric mixtures of (-)-cholesteryl 1-alkenesulfinates 2. Access to diastereomerically enriched (S&s%) vinylic sulfinates (66-75 percent de) was achieved in three instances. Absolute stereochemical assignments were made with the assistance of the chiral solvating agent (R)-2,2,2-trifluoro-1-(9- anthryl)ethanol.

L133 ANSWER 20 OF 21 BABS COPYRIGHT 2007 BEILSTEIN MDL on STN

ACCESSION NUMBER:

**5521334** BABS Full-text

TITLE:

Synthesis and properties of substituted \$a'-lithiated

\$a(Z),\$g-butadienyl sulfoxides. Part II :

Stereochemical studies on products obtained by cyclisation of \$a'-lithiated \$a(Z),\$g-butadienyl

sulfide, sulfoxide and sulfone.

AUTHOR(S):

Reglier, M.; Julia, S. A.

SOURCE:

Bull.Soc.Chim.Fr. (1990), (2), 236-244

CODEN: BSCFAS

DOCUMENT TYPE:

Journal

LANGUAGE:

French

SUMMARY LANGUAGE:

English

AB The lithio derivative of sulfide 1 was prepared and gave after protonation the two compounds trans 6 (45 percent) and cis 7 (15 percent). In the same way, the sulfoxide 2 and sulfone 3 were converted stereospecifically into the anti,cis 11 (68 percent) and cis 9 (61 percent) compounds respectively. The cis heterocyclic compounds 7, 9, and 11 have been chemically correlated and after a thorough survey of the NMR spectra, their stereochemistry has been established. For each of the three lithio derivatives, the possible transition states were examined.

=> d ide hitstr 21

YOU HAVE REQUESTED DATA FROM FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' -CONTINUE? (Y)/N:y

'IDE' IS NOT A VALID FORMAT

REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT): ibib hitstr

L133 ANSWER 21 OF 21 CAOLD COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: CA59:5004b CAOLD

TITLE:

transfer reactions involving B - (III) hydroboration studies

with enethiol ethers

AUTHOR NAME: Pasto, Daniel J.; Miesel, J. L.

88584-31-0 TΤ

88584-31-0 CAOLD RN

Benzene, [[(2-phenylethenyl)sulfinyl]methyl]- (9CI) (CA INDEX NAME)

S CH CH Ph

```
=> d que stat 1112
L110 STR
```

NODE ATTRIBUTES:

CONNECT IS E3 RC AT 3
CONNECT IS E2 RC AT 4
CONNECT IS E2 RC AT 5
DEFAULT MLEVEL IS ATOM
MLEVEL IS CLASS AT 1 6
GGCAT IS UNS AT 1
GGCAT IS UNS AT 6
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 7

STEREO ATTRIBUTES: NONE

L112 52 SEA FILE=MARPAT SSS FUL L110

100.0% PROCESSED 43635 ITERATIONS ( 6 INCOMPLETE) 52 ANSWERS SEARCH TIME: 00.00.14

=> d his 1112-1119

(FILE 'MARPAT' ENTERED AT 08:23:53 ON 13 APR 2007)

FILE 'STNGUIDE' ENTERED AT 08:24:37 ON 13 APR 2007

FILE 'MARPAT' ENTERED AT 08:27:50 ON 13 APR 2007 L112 52 S L110 FUL SAVE TEMP L112 NWA993MARP/A

FILE 'HCAPLUS' ENTERED AT 08:30:56 ON 13 APR 2007

L113 52 S L112

L114 6 S L113 AND L32-L37

L115 46 S L113 NOT L114

L116 34 S L115 AND L85

L117 34 S L116 AND (L39-L75 OR L79-L80)

L118 1 S L117 AND ATHEROSCLER?/TI

FILE 'STNGUIDE' ENTERED AT 08:33:56 ON 13 APR 2007

FILE 'HCAPLUS' ENTERED AT 08:34:03 ON 13 APR 2007 L119 34 S L117 NOT L88

=> d que nos 1119

L6 STR

L7 STR

L9 547 SEA FILE=REGISTRY SSS FUL L7

```
339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L12
L32
                   QUE ABB=ON PLU=ON REDDY, E?/AU
                   QUE ABB=ON PLU=ON REDDY, P?/AU
L33
                   QUE ABB=ON PLU=ON REDDY, M?/AU
QUE ABB=ON PLU=ON REDDY, R?/AU
QUE ABB=ON PLU=ON BELL, S?/AU
L34
L35
L36
L37
                   QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO (W) NOVA)
                   )/CS,SO,PA
                   QUE ABB=ON PLU=ON PROLIFER?
L39
                   QUE ABB=ON PLU=ON DISEAS? OR DISORDER? OR SYNDROM? OR
L40
                  MALADY OR SICKNESS OR ILLNESS OR CONDITION
                QUE ABB=ON PLU=ON HEMANGIOMAT?
L41
L42
                 QUE ABB=ON PLU=ON MULTIPLE (W) SCLERO?
                 QUE ABB=ON PLU=ON MS
L43
                  QUE ABB=ON PLU=ON MYELODEGENER?
L44
                   QUE ABB=ON PLU=ON ?DEGENER? (3A) ?MYELO?
QUE ABB=ON PLU=ON GANGLIONEUROMATO?
QUE ABB=ON PLU=ON KELOID?
L45
L46
L47
L48
                   QUE ABB=ON PLU=ON PAGET?
                   QUE ABB=ON PLU=ON FIBROCYS?
L49
               QUE ABB=ON PLU=ON SKIN OR DELCT.

QUE ABB=ON PLU=ON BRAIN?

QUE ABB=ON PLU=ON LEUKEM? OR LEUKAEM?

QUE ABB=ON PLU=ON IONIZ? OR IONIS?

QUE ABB=ON PLU=ON RADIATION

QUE ABB=ON PLU=ON OPTIC?

QUE ABB=ON PLU=ON ISOMER?

QUE ABB=ON PLU=ON THERAP? OR DRUG OR

CABCOID?
                   QUE ABB=ON PLU=ON COLORECT?
L50
L51
                  QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER?
L52
L53
L54
L55
L56
L57
                QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?

QUE ABB=ON PLU=ON SARCOID?

QUE ABB=ON PLU=ON PERONIES

QUE ABB=ON PLU=ON DUPUTREN
L58
L59
L60
L61
L62
                 QUE ABB=ON PLU=ON FIBROSIS
L63
                   OUE ABB=ON PLU=ON CIRRHO?
L64
                   QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?
                   QUE ABB=ON PLU=ON ?VASCULAR?
L65
                   QUE ABB=ON PLU=ON RESTENO?
QUE ABB=ON PLU=ON ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?S
L66
L67
                   ARCOM? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR
                   ?DYPLAS?
                   QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISA
L68
                   RCOM? OR ANTITUM? OR ANTINEOPLAS?
L69
                   QUE ABB=ON PLU=ON OVARY OR OVARIAN
                   QUE ABB=ON PLU=ON BREAST OR MAMMAR?
QUE ABB=ON PLU=ON PROSTAT?
L70
L71
L72
                   QUE ABB=ON PLU=ON TESTIS OR TESTIC?
L73
                   QUE ABB=ON PLU=ON LUNG
L74
                   QUE ABB=ON PLU=ON PULMONAR?
                   QUE ABB=ON PLU=ON KIDNEY OR RENAL?
L75
              15 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
6 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L39 OR L40 OR L41 OR
L77
L78
                   L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR
                   L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR
                   L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR
                   L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
L79
                   QUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
                  QUE ABB=ON PLU=ON MANUFACT?
L80
             14 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L79 OR L80)
15 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 OR L78 OR L81
L81
L82
               4 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR
L83
```

L119	34 SEA FILE=HCAPLUS ABB=ON PLU=ON L117 NOT L88
	L80))
	OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75) OR (L79 OR
	OR L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68
	OR L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59
	OR L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50
L117	34 SEA FILE=HCAPLUS ABB=ON PLU=ON L116 AND ((L39 OR L40 OR L41
L116	34 SEA FILE=HCAPLUS ABB=ON PLU=ON L115 AND L85
L115	46 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 NOT L114
•	OR L35 OR L36 OR L37)
L114	6 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND (L32 OR L33 OR L34
L113	52 SEA FILE=HCAPLUS ABB=ON PLU=ON L112
L112	52 SEA FILE=MARPAT SSS FUL L110
L110	STR
T88	11 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 OR L87
L87	11 SEA FILE=HCAPLUS ABB=ON PLU=ON L86 AND L84
L86	11 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 NOT L83
L85	QUE ABB=ON PLU=ON AY<2004 OR PY<2004 OR PRY<2004
	<2004 OR REVIEW/DT
L84	QUE ABB=ON PLU=ON AY<2004 OR PY<2004 OR PRY<2004 OR MY
	L35 OR L36 OR L37)

=> d ibib ed ab hitind 1119
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L119 ANSWER 1 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:451346 HCAPLUS Full-text

DOCUMENT NUMBER: 142:481741

TITLE: Preparation of sulfoxide and bis-sulfoxide

compounds and compositions for cholesterol management

and related uses

INVENTOR(S): Dasseux, Jean-Louis; Oniciu, Carmen Daniela

PATENT ASSIGNEE(S): Esperion Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 251 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D	ATE			
WC	2005	0472	36		A1	_	2005	0526	1	WO 2	003-	US41	 614		2	0031	 224 <
	W:	AE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,
*		TN,	TR,	TT,	TZ,	UA,	ŬĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	zw		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD, TG
US	2004	1220	91		A1		2004	0624		US 2	003-	7027	01		2	0031	107 <
AU	2003	3004	40		A1		2004	0606		AU 2	003-	3004	40		2	0031	224 <
PRIORIT	Y APP	LN.	INFO	.:					•	US 2	003-	7027	01	i	A 2	0031	107 <
									,	US 2	000-	2391	05P		P 2	0001	011 <
										US 2	001-	9768	99		A3 2	0011	011 <
									1	WO 2	003-	US41	614	1	W 2	0031	224 <

OTHER SOURCE(S): MARPAT 142:481741

ED Entered STN: 27 May 2005

Title compds. W1ZmSOGSOZmW2 (I) [wherein Z = independently CH2, CH:CH, or AB C6H4; m = independently 1-9; when Z = C6H4, m = 1; G = (CH2)x, CH2CH:CHCH2, CH:CH, CH2C6H4CH2, or C6H4; x = 2-4; W1 and W2 = independently CR1R2(CH2)nY, tetrahydro(oxo)pyranyl(oxy), oxooxetanyl, tetrahydrooxofuranyl, etc.; CR1R2(CH2)cCR3R4(CH2)nY, or CR1R2(CH2)cV; n = 0-4; c = 1-2; R1 and R2 = 1-2independently alkyl, alkenyl, alkynyl, Ph, or benzyl; or when one or both of W1 and W2 = CR1R2(CH2)cCR3R4Y, then R1 and R2 can both be H; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, NO2, or CF3; R4 = OH, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, CN, NO2, or CF3; Y = OH, CO2H, CHO, CO2R5, SO3H, mono-, di-, or triphosphate, dioxo- or dithioxohexahydrothieno[3,2-c]pyridinyl, sulfamoyl, tetrazolyl, hydroxyoxazolyl, hydroxypyranonyl, substituted imidazolidinedionyl, etc.; R5 = (un) substituted alkyl, alkenyl, alkynyl, Ph, or benzyl] were prepared as peroxisome proliferator activated receptor (PPAR) antagonists for treatment and prevention of <a href="mailto:cardiovascular">cardiovascular</a> <a href="mailto:diseases">diseases</a>, dyslipidemias, dysproteinemias, and glucose metabolism disorders. I are also useful for treating and preventing Alzheimer's Disease, Syndrome X, PPAR-related disorders, septicemia,

IC

CC

ST

IT

TΤ

IT

IT

ΙT

IT

IT

IT

thrombotic disorders, obesity, pancreatitis, hypertension, renal disease, cancer inflammation, and impotence. For example, 6-(5,5-dimethyl-6hydroxyhexylsulfanyl)-2,2-dimethylhexan-1-ol was oxidized to 6-(5,5-dimethyl-6-hydroxyhexane-1-sulfinyl)-2,2-dimethylhexan- 1-ol (quant.) using H2O2 in glacial AcOH. The latter increased reduced serum triglycerides in female obese Zucker rats by 48% and 42% after 1 and 2 wk of treatment. Although non-HDL cholesterol increased by 38% and 62%, a marked increase in HDL cholesterol of 2.2-fold and 3.1-fold after one and two weeks of treatment, resp., resulted in an unexpectedly beneficial increased ratio of HDL/non-HDL cholesterol from 2.70 (pretreatment) to 3.84 and 4.97. In certain embodiments, I may be administered in combination therapy with other therapeutics, such as hypocholesterolemic and hypoglycemic agents. ICM C07C317-18 ICS C07C317-24; C07C317-44; C07C317-14; C07C317-04; C07F009-09; C07F009-24; C07F009-44; C07D335-02; C07D333-48; C07D305-12; C07D307-32; C07D309-30; C07D309-38; A61K031-10 23-11 (Aliphatic Compounds) Section cross-reference(s): 1, 63 alkyl sulfoxide prepn anticholesterol hypolipidemic antidiabetic antiobesity; sulfoxide alkyl prepn peroxisome proliferator activated receptor antagonist Fats and Glyceridic oils, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (animal, reduction in livestock; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Heart, disease (cardiac syndrome X, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Egg, poultry (cholesterol reduction; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Sexual disorders (impotence, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Metabolic disorders (metabolic syndrome X, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Inflammation Pancreas, disease (pancreatitis, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Anti-Alzheimer's agents Anti-inflammatory agents Anticholesteremic agents Anticoagulants Antihypertensives Antiobesity agents Antitumor agents Cardiovascular agents Human Hypolipemic agents (preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Fatty acids, biological studies Glycerides, biological studies High-density lipoproteins Low-density lipoproteins Peroxisome proliferator-activated receptors

Very-low-density lipoproteins

RL: BSU (Biological study, unclassified); BIOL (Biological study) (preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses)

## IT Kidney, disease

Septicemia

(treatment; <u>preparation</u> of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses)

IT Dyslipidemia

Dyslipidemia

RL: BSU (Biological study, unclassified); BIOL (Biological study) (treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses)

IT 50-99-7, Glucose, biological studies 57-88-5, Cholesterol, biological studies 300-85-6 9004-10-8, Insulin, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study)

(preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) ΙT 411213-93-9P 412951-56-5P 412951-57-6P 412951-58-7P 412951-59-8P 412951-60-1P 412951-61-2P 412951-62-3P 412951-63-4P 412951-64-5P 412951-65-6P 412951-66-7P 412951-67-8P 412951-68-9P 412951-69-0P 412951-70-3P 412951-71-4P 412951-72-5P 412951-73-6P 412951-74-7P 412951-75-8P 412951-76-9P 412951-77-0P 412951-78-1P 412951-79-2P 412951-80-5P 412951-81-6P 412951-82-7P 412951-83-8P 412951-84-9P 412951-85-0P 412951-86-1P 412951-87-2P 412951-88-3P 412951-89-4P 412951-90-7P 412951-91-8P 412951-92-9P 412951-93-0P 412951-94-1P 412951-96-3P 412951-97-4P 412951-98-5P 412951-95-2P 412951-99-6P 412952-00-2P 412952-01-3P 412952-02-4P 412952-03-5P 412952-04-6P 412952-05-7P 412952-06-8P 412952-07-9P 412952-08-0P 412952-09-1P 412952-10-4P 412952-11-5P 412952-12-6P 412952-13-7P 412952-14-8P 412952-15-9P 412952-16-0P 412952-17-1P 412952-18-2P 412952-19-3P 412952-20-6P 412952-21-7P 412952-22-8P 412952-23-9P 412952-24-0P 412952-25-1P 412952-26-2P 412952-27-3P 412952-28-4P 412952-29-5P 412952-30-8P 412952-31-9P 412952-32-0P 412952-33-1P 412952-34-2P 412952-35-3P 412952-38-6P 412952-39-7P 412952-36-4P 412952-37-5P 412952-43-3P 412952-40-0P 412952-41-1P 412952-42-2P 412952-44-4P 412952-45-5P 412952-47-7P 412952-49-9P 412952-51-3P 412952-52-4P 412952-55-7P 412952-53-5P 412952-54-6P 412952-56-8P 412952-57-9P 412952-58-0P 412952-59-1P 412952-60-4P 412952-61-5P 412952-62-6P 412952-63-7P 412952-64-8P 412952-65-9P 412952-66-0P 412952-67-1P 412952-68-2P 412952-69-3P 412952-70-6P 412952-71-7P 412952-72-8P 412952-73-9P 412952-74-0P 412952-75-1P 412952-76-2P 412952-77-3P 412952-78-4P 412952-79-5P 412952-80-8P 412952-81-9P 412952-82-0P 412952-83-1P 412952-84-2P 412952-85-3P 412952-86-4P 412952-87-5P 412952-88-6P 412952-89-7P 412952-90-0P 412952-91-1P 412952-92-2P 412952-93-3P 412952-94-4P 412952-95-5P 412952-96-6P 412952-97-7P 412952-98-8P 412952-99-9P 412953-00-5P 412953-01-6P 412953-02-7P 412953-03-8P 412953-04-9P 412953-05-0P 412953-06-1P 412953-07-2P 412953-08-3P 412953-09-4P 412953-10-7P 412953-11-8P 412953-12-9P 412953-13-0P 412953-14-1P 412953-15-2P 412953-16-3P 412953-17-4P 412953-18-5P 412953-19-6P 412953-20-9P 412953-21-0P 412953-22-1P 412953-23-2P 412953-24-3P 412953-26-5P 412953-28-7P 412953-29-8P 412953-30-1P 412953-31-2P 412953-32-3P 412953-33-4P 412953-34-5P 412953-35-6P 412953-36-7P 412953-37-8P 412953-38-9P 412953-39-0P 412953-40-3P 412953-41-4P 412953-42-5P 412953-43-6P 412953-44-7P 412953-45-8P 412953-46-9P 412953-47-0P 412953-48-1P 412953-49-2P 412953-50-5P 412953-51-6P 412953-52-7P 412953-53-8P 412953-54-9P 412953-55-0P 412953-56-1P 412953-57-2P 412953-58-3P 412953-59-4P 412953-60-7P 412953-61-8P 412953-62-9P 412953-63-0P 412953-64-1P 412953-65-2P 412953-66-3P 412953-67-4P 412953-68-5P 412953-69-6P

412953-73-2P

412953-74-3P

412953-72-1P

412953-70-9P

IT

IT

412953-71-0P

```
412953-76-5P
                                                                   412953-79-8P
    412953-75-4P
                                    412953-77-6P
                                                   412953-78-7P
    412953-80-1P
                    412953-81-2P
                                    412953-82-3P
                                                   412953-83-4P
                                                                   412953-85-6P
    412953-86-7P
                    412953-87-8P
                                    412953-88-9P
                                                   412953-89-0P
                                                                   412953-90-3P
    412953-91-4P
                    412953-92-5P
                                    412953-93-6P
                                                   412953-94-7P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
                    412953-96-9P
    412953-95-8P
                                    412953-97-0P
                                                   412953-98-1P
                                                                   412953-99-2P
                    412954-01-9P
    412954-00-8P
                                    412954-02-0P
                                                   412954-03-1P
                                                                   412954-04-2P
                    412954-06-4P
                                    412954-07-5P
                                                   412954-08-6P
                                                                   412954-09-7P
    412954-05-3P
    412954-10-0P
                    412954-11-1P
                                    412954-12-2P
                                                   412954-13-3P
                                                                   412954-14-4P
     412954-15-5P
                    412954-16-6P
                                    412954-17-7P
                                                    412954-18-8P
                                                                   412954-19-9P
     412954-20-2P
                    412954-21-3P
                                    412954-22-4P
                                                   412954-23-5P
                                                                   412954-24-6P
     412954-25-7P
                    412954-26-8P
                                    412954-27-9P
                                                   412954-28-0P
                                                                   412954-29-1P
     412954-30-4P
                    412954-31-5P
                                    412954-32-6P
                                                   412954-33-7P
                                                                   412954-34-8P
     412954-35-9P
                    412954-36-0P
                                    412954-37-1P
                                                    412954-38-2P
                                                                   412954-39-3P
     412954-40-6P
                    412954-41-7P
                                    412954-42-8P
                                                    412954-43-9P
                                                                   412954-44-0P
     412954-45-1P
                    412954-46-2P
                                    412954-47-3P
                                                    412954-48-4P
                                                                   412954-49-5P
     412954-50-8P
                    412954-51-9P
                                    412954-52-0P
                                                    412954-53-1P
                                                                   412954-54-2P
     412954-55-3P
                    412954-56-4P
                                    412954-57-5P
                                                    412954-58-6P
                                                                   412954-59-7P
     412954-60-0P
                    412954-61-1P
                                    412954-62-2P
                                                    412954-63-3P
                                                                   412954-64-4P
     412954-65-5P
                    412954-66-6P
                                    412954-67-7P
                                                    412954-68-8P
                                                                   412954-69-9P
                                                    412954-73-5P
     412954-70-2P
                    412954-71-3P
                                    412954-72-4P
                                                                   412954-74-6P
     412954-75-7P
                    412954-76-8P
                                    412954-77-9P
                                                    412954-78-0P
                                                                   412954-79-1P
     412954-80-4P
                    412954-81-5P
                                    412954-82-6P
                                                    412954-83-7P
                                                                   412954-84-8P
     412954-85-9P
                    412954-86-0P
                                    412954-87-1P
                                                    412954-88-2P
                                                                   412954-89-3P
     412954-90-6P
                    412954-91-7P
                                    412954-92-8P
                                                    412954-93-9P
                                                                   412954-94-0P
     412954-95-1P
                    412954-96-2P
                                    412954-97-3P
                                                    412954-98-4P
                                                                   412954-99-5P
     412955-00-1P
                    412955-01-2P
                                    412955-02-3P
                                                    412955-03-4P
                                                                   412955-04-5P
     412955-05-6P
                    412955-06-7P
                                    412955-07-8P
                                                    412955-08-9P
                                                                   412955-09-0P
                                    412955-14-7P
     412955-10-3P
                    412955-12-5P
                                                    412955-16-9P
                                                                   412955-17-0P
     412955-18-1P
                    412955-19-2P
                                    412955-20-5P
                                                    412955-21-6P
                                                                   412955-22-7P
     412955-23-8P
                    412955-24-9P
                                    412955-25-0P
                                                    412955-26-1P
                                                                   412955-27-2P
     412955-28-3P
                    412955-29-4P
                                    412955-30-7P
                                                    412955-31-8P
                                                                   412955-32-9P
                                                    412955-36-3P
     412955-33-0P
                    412955-34-1P
                                    412955-35-2P
                                                                   412955-37-4P
     412955-38-5P
                    412955-39-6P
                                    412955-40-9P
                                                    412955-41-0P
                                                                   412955-42-1P
     412955-43-2P
                    412955-44-3P
                                    412955-45-4P
                                                    412955-46-5P
                                                                   412955-47-6P
                                    412955-50-1P
     412955-48-7P
                    412955-49-8P
                                                    412955-51-2P
                                                                   412955-52-3P
     412955-53-4P
                    412955-54-5P
                                    412955-55-6P
                                                    412955-56-7P
                                                                   412955-57-8P
     412955-58-9P
                    412955-59-0P
                                    412955-60-3P
                                                    412955-61-4P
                                                                   412955-62-5P
     412955-63-6P
                    412955-64-7P
                                    412955-65-8P
                                                    412955-66-9P
                                                                   412955-67-0P
     412955-68-1P
                    412955-69-2P
                                    412955-70-5P
                                                    412955-71-6P
                                                                   412955-72-7P
     412955-73-8P
                    412955-74-9P
                                    412955-75-0P
                                                    412955-76-1P
                                                                   412955-77-2P
     412955-78-3P
                    412955-79-4P
                                    412955-80-7P
                                                    412955-81-8P
                                                                   412955-82-9P
     412955-83-0P
                    412955-84-1P
                                    412955-85-2P
                                                    412955-86-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
     412934-88-4
                   412934-91-9
                                  412935-66-1 412935-69-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        .cholesterol management and related uses)
REFERENCE COUNT:
                          7
                                THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
```

=> d ibib ed ab hitind 1119 2-34 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS' - CONTINUE? (Y)/N:y

L119 ANSWER 2 OF 34 HCAPLUS COPYRIGHT 2007 ACS, on STN

ACCESSION NUMBER:

2004:857199 HCAPLUS Full-text

DOCUMENT NUMBER:

141:331803

TITLE:

Preparation of sulfoxide and bis-sulfoxide

compounds and compositions for cholesterol management

and related uses

INVENTOR(S):

Dasseux, Jean-Louis Henri; Oniciu, Daniela Carmen

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 142 pp., Cont.-in-part of U.S.

Ser. No. 976,899.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APP1	LICATION NO.		DATE	
US 2004204502	A1	20041014	US 2	2003-744401		20031224	<
US 2003022865	A1	20030130	US 2	2001-976899		20011011	<
us 6673780	B2	20040106					
PRIORITY APPLN. INFO.:			US 2	2001-976899	A2	20011011	<
			US 2	2000-239105P	P	20001011	<

MARPAT 141:331803 OTHER SOURCE(S):

Entered STN: 18 Oct 2004 ED Title compds. W1ZmSOGSOZmW2 (I) [wherein Z = independently CH2, CH:CH, or AΒ C6H4; m = independently 1-9; when Z = C6H4, m = 1; G = (CH2)x, CH2CH:CHCH2, CH:CH, CH2C6H4CH2, or C6H4; x = 2-4; W1 and W2 = independently CR1R2(CH2)nY, tetrahydro(oxo)pyranyl(oxy), oxooxetanyl, tetrahydrooxofuranyl, etc.; CR1R2(CH2)cCR3R4(CH2)nY, or CR1R2(CH2)cV; n = 0-4; c = 1-2; R1 and R2 = 1-2independently alkyl, alkenyl, alkynyl, Ph, or benzyl; or when one or both of W1 and W2 = CR1R2(CH2)cCR3R4Y, then R1 and R2 can both be H; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, NO2, or CF3; R4 = OH, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, CN, NO2, or CF3; Y = OH, CO2H, CHO, CO2R5, SO3H, mono-, di-, or triphosphate, dioxo- or dithioxohexahydrothieno[3,2-c]pyridinyl, sulfamoyl, tetrazolyl, hydroxyoxazolyl, hydroxypyranonyl, substituted imidazolidinedionyl, etc.; R5 = (un) substituted alkyl, alkenyl, alkynyl, Ph, or benzyl] were prepared as peroxisome proliferator activated receptor (PPAR) antagonists for treatment and prevention of cardiovascular diseases, dyslipidemias, dysproteinemias, and glucose metabolism disorders. I are also useful for treating and preventing Alzheimer's Disease, Syndrome X, PPAR-related disorders, septicemia, thrombotic disorders , obesity, pancreatitis, hypertension, renal disease, cancer inflammation, and impotence. For example, 6-(5,5-dimethyl-6hydroxyhexylsulfanyl)-2,2-dimethylhexan-1-ol was oxidized to 6-(5,5-dimethyl-6-hydroxyhexane-1-sulfinyl)-2,2-dimethylhexan- 1-ol (quant.) using H2O2 in glacial AcOH. The latter increased reduced serum triglycerides in female obese Zucker rats by 48% and 42% after 1 and 2 wk of treatment. Although non-HDL cholesterol increased by 38% and 62%, a marked increase in HDL cholesterol of 2.2-fold and 3.1-fold after one and two weeks of treatment, resp., resulted in an unexpectedly beneficial increased ratio of HDL/non-HDL cholesterol from 2.70 (pretreatment) to 3.84 and 4.97. In certain embodiments, I may be administered in combination therapy with other therapeutics, such as hypocholesterolemic and hypoglycemic agents.

```
IC
     ICM A61K031-10
INCL 514708000; 568027000
     23-11 (Aliphatic Compounds)
     Section cross-reference(s): 1, 63
     alkyl sulfoxide prepn anticholesterol hypolipidemic antidiabetic
ST
     antiobesity; sulfoxide alkyl prepn peroxisome
     proliferator activated receptor antagonist
IT
     Fats and Glyceridic oils, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (animal, reduction in livestock; preparation of sulfoxide and
        bis-sulfoxide compds. as for cholesterol management and related uses)
IT
    Heart, disease
        (cardiac syndrome X, treatment; preparation of sulfoxide
        and bis-sulfoxide compds. as for cholesterol management and related
IT
     Egg, poultry
        (cholesterol reduction; preparation of sulfoxide and bis-sulfoxide
        compds. as for cholesterol management and related uses)
IT
     Sexual disorders
        (impotence, treatment; preparation of sulfoxide and bis-sulfoxide
        compds. as for cholesterol management and related uses)
IT '
    Metabolic disorders
        (metabolic syndrome X, treatment; preparation of
        sulfoxide and bis-sulfoxide compds. as for cholesterol management and
        related uses)
IT
     Inflammation
     Pancreas, disease
        (pancreatitis, treatment; preparation of sulfoxide and
        bis-sulfoxide compds. as for cholesterol management and related uses)
     Anti-Alzheimer's agents
     Anti-inflammatory agents
     Anticholesteremic agents
     Anticoagulants
     Antihypertensives
     Antiobesity agents
       Antitumor agents
       Cardiovascular agents
     Human
     Hypolipemic agents
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
IT
     Fatty acids, biological studies
     Glycerides, biological studies
     High-density lipoproteins
     Low-density lipoproteins
     Peroxisome proliferator-activated receptors
     Very-low-density lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
IT
     Kidney, disease
     Septicemia
        (treatment; preparation of sulfoxide and bis-sulfoxide compds. as
        for cholesterol management and related uses)
     Dyslipidemia
TТ
     Dyslipidemia
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (treatment; preparation of sulfoxide and bis-sulfoxide compds. as
        for cholesterol management and related uses)
```

50-99-7, Glucose, biological studies 57-88-5, Cholesterol, biological

IT

studies 300-85-6 9004-10-8, Insulin, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (preparation of sulfoxide and bis-sulfoxide compds. as for

```
cholesterol management and related uses)
IT
     411213-93-9P
                     412951-56-5P
                                     412951-57-6P
                                                     412951-58-7P
                                                                     412951-59-8P
                                                                     412951-64-5P
     412951-60-1P
                     412951-61-2P
                                     412951-62-3P
                                                     412951-63-4P
                     412951-66-7P
                                     412951-67-8P
                                                     412951-68-9P
                                                                     412951-69-0P
     412951-65-6P
                                     412951-72-5P
                                                     412951-73-6P
                                                                     412951-74-7P
                     412951-71-4P
     412951-70-3P
                                     412951-77-0P
                                                     412951-78-1P
                                                                     412951-79-2P
     412951-75-8P
                     412951-76-9P
                                     412951-82-7P
                                                     412951-83-8P
                                                                     412951-84-9P
     412951-80-5P
                     412951-81-6P
     412951-85-0P
                     412951-86-1P
                                     412951-87-2P
                                                     412951-88-3P
                                                                     412951-89-4P
     412951-90-7P
                     412951-91-8P
                                     412951-92-9P
                                                     412951-93-0P
                                                                     412951-94-1P
     412951-95-2P
                     412951-96-3P
                                     412951-97-4P
                                                     412951-98-5P
                                                                     412951-99-6P
                                                     412952-03-5P
                                                                     412952-04-6P
     412952-00-2P
                     412952-01-3P
                                     412952-02-4P
                     412952-06-8P
                                     412952-07-9P
                                                     412952-08-0P
                                                                     412952-09-1P
     412952-05-7P
     412952-10-4P
                     412952-11-5P
                                     412952-12-6P
                                                     412952-13-7P
                                                                     412952-14-8P
                                                     412952-18-2P
                                                                     412952-19-3P
     412952-15-9P
                     412952-16-0P
                                     412952-17-1P
     412952-20-6P
                     412952-21-7P
                                     412952-22-8P
                                                     412952-23-9P
                                                                     412952-24-0P
     412952-25-1P
                                                     412952-28-4P
                     412952-26-2P
                                     412952-27-3P
                                                                     412952-29-5P
     412952-30-8P
                     412952-31-9P
                                     412952-32-0P
                                                     412952-33-1P
                                                                     412952-34-2P
                                                                     412952-39-7P
     412952-35-3P
                     412952-36-4P
                                     412952-37-5P
                                                     412952-38-6P
                                     412952-42-2P
     412952-40-0P
                     412952-41-1P
                                                     412952-43-3P
                                                                     412952-44-4P
                     412952-47-7P
                                     412952-49-9P
                                                     412952-51-3P
                                                                     412952-52-4P
     412952-45-5P
                     412952-54-6P
                                     412952-55-7P
                                                     412952-56-8P
                                                                     412952-57-9P
     412952-53-5P
     412952-58-0P
                     412952-59-1P
                                     412952-60-4P
                                                     412952-61-5P
                                                                     412952-62-6P
                     412952-64-8P
                                     412952-65-9P
                                                     412952-66-0P
                                                                     412952-67-1P
     412952-63-7P
                                     412952-70-6P
                                                     412952-71-7P
                                                                     412952-72-8P
                     412952-69-3P
     412952-68-2P
     412952-73-9P
                     412952-74-0P
                                     412952-75-1P
                                                     412952-76-2P
                                                                     412952-77-3P
     412952-78-4P
                     412952-79-5P
                                     412952-80-8P
                                                     412952-81-9P
                                                                     412952-82-0P
     412952-83-1P
                     412952-84-2P
                                     412952-85-3P
                                                     412952-86-4P
                                                                     412952-87-5P
                     412952-89-7P
                                     412952-90-0P
                                                     412952-91-1P
                                                                     412952-92-2P
     412952-88-6P
     412952-93-3P
                     412952-94-4P
                                     412952-95-5P
                                                     412952-96-6P
                                                                     412952-97-7P
     412952-98-8P
                     412952-99-9P
                                     412953-00-5P
                                                     412953-01-6P
                                                                     412953-02-7P
                                     412953-05-0P
                                                     412953-06-1P
                                                                     412953-07-2P
     412953-03-8P
                     412953-04-9P
                     412953-09-4P
     412953-08-3P
                                     412953-10-7P
                                                     412953-11-8P
                                                                     412953-12-9P
     412953-13-0P
                     412953-14-1P
                                     412953-15-2P
                                                     412953-16-3P
                                                                     412953-17-4P
                     412953-19-6P
                                     412953-20-9P
                                                                     412953-22-1P
     412953-18-5P
                                                     412953-21-0P
                                     412953-26-5P
                                                     412953-28-7P
                                                                     412953-29-8P
     412953-23-2P
                     412953-24-3P
                     412953-31-2P
                                     412953-32-3P
                                                     412953-33-4P
                                                                     412953-34-5P
     412953-30-1P
     412953-35-6P
                     412953-36-7P
                                     412953-37-8P
                                                     412953-38-9P
                                                                     412953-39-0P
                                     412953-42-5P
                                                     412953-43-6P
                                                                     412953-44-7P
     412953-40-3P
                     412953-41-4P
     412953-45-8P
                     412953-46-9P
                                     412953-47-0P
                                                     412953-48-1P
                                                                     412953-49-2P
                     412953-51-6P
                                     412953-52-7P
                                                     412953-53-8P
                                                                     412953-54-9P
     412953-50-5P
                                     412953-57-2P
                                                     412953-58-3P
                                                                     412953-59-4P
     412953-55-0P
                     412953-56-1P
                     412953-61-8P
                                     412953-62-9P
                                                     412953-63-0P
                                                                     412953-64-1P
     412953-60-7P
     412953-65-2P
                     412953-66-3P
                                     412953-67-4P
                                                     412953-68-5P
                                                                     412953-69-6P
     412953-70-9P
                     412953-71-0P
                                     412953-72-1P
                                                     412953-73-2P
                                                                     412953-74-3P
     412953-75-4P
                     412953-76-5P
                                     412953-77-6P
                                                     412953-78-7P
                                                                     412953-79-8P
     412953-80-1P
                     412953-81-2P
                                     412953-82-3P
                                                     412953-83-4P
                                                                     412953-85-6P
     412953-86-7P
                     412953-87-8P
                                     412953-88-9P
                                                     412953-89-0P
                                                                     412953-90-3P
                                     412953-93-6P
     412953-91-4P
                     412953-92-5P
                                                     412953-94-7P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
```

(preparation of sulfoxide and bis-sulfoxide compds. as for

	cholesterol	management and	related uses)		
IT	412953-95-8P	412953-96-9P	412953-97-0P	412953-98-1P	412953-99-2P
	412954-00-8P	412954-01-9P	412954-02-0P	412954-03-1P	412954-04-2P
	412954-05-3P	412954-06-4P	412954-07-5P	412954-08-6P	412954-09-7P
	412954-10-0P	412954-11-1P	412954-12-2P	412954-13-3P	412954-14-4P

```
412954-15-5P
                   412954-16-6P
                                    412954-17-7P
                                                   412954-18-8P
                                                                   412954-19-9P
     412954-20-2P
                    412954-21-3P
                                    412954-22-4P
                                                   412954-23-5P
                                                                   412954-24-6P
     412954-25-7P
                    412954-26-8P
                                    412954-27-9P
                                                   412954-28-0P
                                                                   412954-29-1P
     412954-30-4P
                    412954-31-5P
                                    412954-32-6P
                                                   412954-33-7P
                                                                   412954-34-8P
                                    412954-37-1P
     412954-35-9P
                    412954-36-0P
                                                                   412954-39-3P
                                                   412954-38-2P
     412954-40-6P
                    412954-41-7P
                                    412954-42-8P
                                                   412954-43-9P
                                                                   412954-44-0P
     412954-45-1P
                    412954-46-2P
                                    412954-47-3P
                                                   412954-48-4P
                                                                   412954-49-5P
     412954-50-8P
                    412954-51-9P
                                    412954-52-0P
                                                   412954-53-1P
                                                                   412954-54-2P
     412954-55-3P
                    412954-56-4P
                                    412954-57-5P
                                                   412954-58-6P
                                                                   412954-59-7P
     412954-60-0P
                    412954-61-1P
                                    412954-62-2P
                                                   412954-63-3P
                                                                   412954-64-4P
                                    412954-67-7P
                                                                   412954-69-9P
     412954-65-5P
                    412954-66-6P
                                                   412954-68-8P
     412954-70-2P
                    412954-71-3P
                                    412954-72-4P
                                                   412954-73-5P
                                                                   412954-74-6P
     412954-75-7P
                    412954-76-8P
                                    412954-77-9P
                                                   412954-78-0P
                                                                   412954-79-1P
     412954-80-4P
                    412954-81-5P
                                    412954-82-6P
                                                   412954-83-7P
                                                                   412954-84-8P
     412954-85-9P
                    412954-86-0P
                                    412954-87-1P
                                                   412954-88-2P
                                                                   412954-89-3P
     412954-90-6P
                    412954-91-7P
                                    412954-92-8P
                                                   412954-93-9P
                                                                   412954-94-0P
     412954-95-1P
                    412954-96-2P
                                    412954-97-3P
                                                   412954-98-4P
                                                                   412954-99-5P
     412955-00-1P
                    412955-01-2P
                                    412955-02-3P
                                                   412955-03-4P
                                                                   412955-04-5P
     412955-05-6P
                    412955-06-7P
                                    412955-07-8P
                                                   412955-08-9P
                                                                   412955-09-0P
     412955-10-3P
                    412955-12-5P
                                    412955-14-7P
                                                   412955-16-9P
                                                                   412955-17-0P
     412955-18-1P
                    412955-19-2P
                                    412955-20-5P
                                                   412955-21-6P
                                                                   412955-22-7P
     412955-23-8P
                    412955-24-9P
                                    412955-25-0P
                                                   412955-26-1P
                                                                   412955-27-2P
     412955-28-3P
                    412955-29-4P
                                    412955-30-7P
                                                   412955-31-8P
                                                                   412955-32-9P
     412955-33-0P
                    412955-34-1P
                                                   412955-36-3P
                                    412955-35-2P
                                                                   412955-37-4P
     412955-38-5P
                    412955-39-6P
                                    412955-40-9P
                                                   412955-41-0P
                                                                   412955-42-1P
     412955-43-2P
                    412955-44-3P
                                    412955-45-4P
                                                   412955-46-5P
                                                                   412955-47-6P
     412955-48-7P
                    412955-49-8P
                                    412955-50-1P
                                                   412955-51-2P
                                                                   412955-52-3P
     412955-53-4P
                    412955-54-5P
                                    412955-55-6P
                                                   412955-56-7P
                                                                   412955-57-8P
     412955-58-9P
                    412955-59-0P
                                                   412955-61-4P
                                    412955-60-3P
                                                                   412955-62-5P
     412955-63-6P
                    412955-64-7P
                                    412955-65-8P
                                                   412955-66-9P
                                                                   412955-67-0P
     412955-68-1P
                                                   412955-71-6P
                    412955-69-2P
                                    412955-70-5P
                                                                   412955-72-7P
     412955-73-8P
                    412955-74-9P
                                    412955-75-0P
                                                   412955-76-1P
                                                                   412955-77-2P
     412955-78-3P
                    412955-79-4P
                                    412955-80-7P
                                                   412955-81-8P
                                                                   412955-82-9P
                                    412955-85-2P
     412955-83-0P
                    412955-84-1P
                                                   412955-86-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
                   412934-91-9
     412934-88-4
                                  412935-66-1
                                                412935-69-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
L119 ANSWER 3 OF 34
                     HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2004:546510 HCAPLUS Full-text
DOCUMENT NUMBER:
                         141:106487
TITLE:
                         Preparation of pyrrolopyrimidine derivatives
                          as antiproliferative agents
INVENTOR(S):
                         Arcari, Joel Thomas; Chen, Jinshan; Lagreca, Susan;
                         Marx, Matthew Arnold; Wessel, Matthew David
PATENT ASSIGNEE(S):
                          Pfizer Products Inc., USA
SOURCE:
                          PCT Int. Appl., 157 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

PATENT NO.

ΙT

KIND DATE APPLICATION NO.

DATE

```
WO 2004056830
                          A1
                                20040708
                                            WO 2003-IB5841
                                                                    20031208 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
             GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
             LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
             OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
             TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
             ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
             TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040708
                                           CA 2003-2510853
     CA 2510853
                          A1
                                                                    20031208 <--
     AU 2003286317
                          A1
                                20040714
                                            AU 2003-286317
                                                                    20031208 <--
     EP 1578751
                                20050928
                                            EP 2003-777060
                          Α1
                                                                    20031208 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     BR 2003017524
                          Α
                                20051116
                                            BR 2003-17524
                                                                    20031208 <--
     CN 1726218
                          Α
                                20060125
                                            CN 2003-80106451
                                                                    20031208 <--
     JP 2006512356
                          T
                                20060413
                                            JP 2004-561818
                                                                    20031208 <--
     US 2005037999
                          Α1
                                20050217
                                            US 2003-732509
                                                                    20031210 <--
     NL 1025068
                          A1
                                20040622
                                            NL 2003-1025068
                                                                    20031218 <--
     NL 1025068
                          C2
                                20041116
     IN 2005DN02441
                          Α
                                20070105
                                            IN 2005-DN2441
                                                                    20050607 <--
     NO 2005002802
                          Α
                                20050719
                                            NO 2005-2802
                                                                    20050609 <--
                                            US 2002-434568P
PRIORITY APPLN. INFO.:
                                                                 P 20021219 <--
                                            WO 2003-IB5841
                                                                 W 20031208 <--
OTHER SOURCE(S):
                         MARPAT 141:106487
     Entered STN: 08 Jul 2004
ED
AB
     Pyrrolopyrimidines I (Q = CO, amino, S, sulfinyl, sulfonyl, etc.; A = bond,
     aryl, heteroarom. ring, alkyl, etc.; L = alkylene, O, S, sulfinyl, sulfonyl,
     amino, etc.; R1 = H, alkyl, cycloalkyl, substituted bicycloalkyl, etc.; R2 =
     H, halo, alkyl, cycloalkyl, heterocycloalkyl, amino, etc.; R3 = H, alkyl,
     cycloalkyl, heteroalkyl, etc.) and their pharmaceutically acceptable salts,
     useful for treatment of hyperproliferative disorders, are prepared Thus,
     reaction of 2,6-difluorophenyl isocyanate with (4-amino-7-cyclopentyl-7H-
     pyrrolo[2,3-d]pyrimidin-5-yl)-(3-aminophenyl)- methanone in pyridine at 90°
     for 3 h gave 28% 1-[3-(4-amino-7- cyclopentyl-7H-pyrrolo[2,3-d]pyrimidine-5-
     carbonyl)phenyl]-3-(2,6- difluorophenyl)-urea.
IC
     ICM C07D487-04
     ICS A61K031-505; A61P035-00
     28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1
ST
     pyrrolopyrimidine prepn antiproliferative agent
IT
     Cytotoxic agents
        (antimetabolites, combination therapy; preparation of
        pyrrolopyrimidines as antiproliferative agents)
IT
     Alkylating agents, biological
     Angiogenesis inhibitors
        (combination therapy; preparation of pyrrolopyrimidines
        as antiproliferative agents)
IT
     Hormone antagonists
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (combination therapy; preparation of pyrrolopyrimidines
        as antiproliferative agents)
IT
     Enzymes, biological studies
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (combination therapy; preparation of pyrrolopyrimidines
        as antiproliferative agents)
```

```
IT
     Antiandrogens
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination therapy; preparation of pyrrolopyrimidines
        as antiproliferative agents)
TΤ
     Cell proliferation
        (inhibition, hyperproliferation, combination therapy;
        preparation of pyrrolopyrimidines as antiproliferative agents)
IT
     Cell cycle
     Mitosis
        (inhibitor, combination therapy; preparation of
        pyrrolopyrimidines as antiproliferative agents)
IT
     Growth factors, animal
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitor, combination therapy; preparation of
        pyrrolopyrimidines as antiproliferative agents)
IT
     Antibiotics
        (intercalating, combination therapy; preparation of
        pyrrolopyrimidines as antiproliferative agents)
IT
     Antitumor agents
       Neoplasm
        (preparation of pyrrolopyrimidines as antiproliferative agents)
IT:
     Drug delivery systems
        (prodrugs; preparation of pyrrolopyrimidines as antiproliferative
        agents)
IT
     80449-01-0, Topoisomerase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (inhibitor, combination therapy; preparation of
        pyrrolopyrimidines as antiproliferative agents)
ΙT
     65-85-0, Benzoic acid, reactions 74-88-4, Iodomethane,
                 75-07-0, Acetaldehyde, <u>reactions</u>
                                                    121-90-4,
     reactions
     3-Nitrobenzoyl chloride 122-04-3, 4-Nitrobenzoyl chloride
                                                                   124-63-0,
     Methanesulfonyl chloride 137-43-9, Cyclopentyl bromide
                                                                610-14-0,
     2-Nitrobenzoyl chloride 618-51-9, 3-Iodobenzoic acid
                                                              705-21-5,
     3,5-Dichlorophenylsulfonyl chloride 765-30-0, Cyclopropylamine
     1609-86-5, tert-Butyl isocyanate 1885-14-9, Phenyl chloroformate
     1975-50-4, 2-Methyl-3-nitrobenzoic acid 2450-71-7, Propargylamine
                                         2905-23-9, 2-Chlorobenzenesulfonyl
     2646-90-4, 2,5-Difluorobenzaldehyde
                3680-69-1, 4-Chloro-7H-pyrrolo[2,3-d]pyrimidine 6638-79-5,
     O, N-Dimethylhydroxylamine hydrochloride
                                              7051-34-5,
     (Bromomethyl)cyclopropane 18063-02-0, 2,6-Difluorobenzoyl chloride
     19654-32-1, 2,4-Dichlorobenzyl isocyanate
                                                 22948-02-3,
                           24424-99-5, Di-tert-butyl dicarbonate
     3-Aminobenzenethiol
                                                                   28611-39-4,
                                         34893-92-0, 3,5-Dichlorophenyl
     4-Dimethylaminophenylboronic acid
     isocyanate 65295-69-4, 2,6-Difluorophenyl isocyanate
                                                              85958-57-2,
     2-Chloro-4-fluorobenzenesulfonyl chloride 109384-19-2,
                                                              213745-17-6
     4-Hydroxypiperidine-1-carboxylic acid tert-butyl ester
     717900-73-7
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of pyrrolopyrimidines as antiproliferative agents)
                 92136-39-5P 170282-53-8P, 3-Iodo-N-methoxy-N-
IT
     7781-10-4P
                       177963-15-4P
                                      195622-56-1P
     methylbenzamide
                                                     212268-44-5P
     717900-59-9P
                   717900-60-2P
                                   717900-61-3P
                                                 717900-62-4P
                                                                 717900-64-6P
     717900-65-7P
                    717900-66-8P
                                   717900-67-9P
                                                  717900-68-0P
                                                                 717900-70-4P
     717900-71-5P
                    717900-72-6P
                                   717900-74-8P
                                                  717900-76-0P
                                                                 717900-77-1P
     717900-78-2P
                    717900-79-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
         (preparation of pyrrolopyrimidines as antiproliferative agents)
                                  717898-28-7P
ΙT
     717894-28-5P
                    717897-97-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use);
```

BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

```
(preparation of pyrrolopyrimidines as antiproliferative agents)
                                                    717894-36-5P
                                                                    717894-38-7P
IT
     717894-30-9P
                     717894-32-1P
                                     717894-34-3P
                                                     717894-46-7P
                                     717894-44-5P
                                                                    717894-48-9P
                     717894-42-3P
     717894-40-1P
                                                    717894-53-6P
                                                                    717894-55-8P
     717894-49-0P
                     717894-50-3P
                                     717894-51-4P
     717894-57-0P
                     717894-59-2P
                                     717894-63-8P
                                                    717894-65-0P
                                                                    717894-67-2P
                     717894-71-8P
                                     717894-72-9P
                                                    717894-74-1P
                                                                    717894-76-3P
     717894-69-4P
     717894-79-6P
                     717894-81-0P
                                     717894-83-2P
                                                     717894-86-5P
                                                                    717894-89-8P
                                                                    717894-97-8P
     717894-90-1P
                     717894-92-3P
                                     717894-94-5P
                                                     717894-96-7P
                                                     717895-06-2P
                                                                    717895-08-4P
     717894-98-9P
                     717895-00-6P
                                     717895-02-8P
                                                    717895-15-3P
                                                                    717895-17-5P
     717895-10-8P
                     717895-12-0P
                                     717895-13-1P
                                                     717895-27-7P
                                                                    717895-29-9P
     717895-21-1P
                     717895-23-3P
                                     717895-25-5P
                                                     717895-38-0P
                                                                    717895-40-4P
     717895-32-4P
                     717895-34-6P
                                     717895-36-8P
     717895-42-6P
                     717895-44-8P
                                     717895-46-0P
                                                     717895-48-2P
                                                                    717895-50-6P
     717895-52-8P
                     717895-54-0P
                                     717895-57-3P
                                                     717895-59-5P
                                                                    717895-61-9P
     717895-63-1P
                     717895-65-3P
                                     717895-67-5P
                                                     717895-69-7P
                                                                    717895-71-1P
                     717895-75-5P
                                     717895-77-7P
                                                     717895-79-9P
                                                                    717895-81-3P
     717895-74-4P
                                     717895-87-9P
                                                     717895-89-1P
                                                                    717895-90-4P
     717895-83-5P
                     717895-85-7P
     717895-92-6P
                     717895-94-8P
                                     717895-96-0P
                                                     717895-99-3P
                                                                    717896-01-0P
                                                     717896-09-8P
                                                                    717896-11-2P
     717896-03-2P
                     717896-05-4P
                                     717896-07-6P
                     717896-16-7P
                                     717896-17-8P
                                                     717896-19-0P
                                                                    717896-21-4P
     717896-14-5P
     717896-23-6P
                     717896-25-8P
                                     717896-28-1P
                                                     717896-30-5P
                                                                    717896-32-7P
                                     717896-38-3P
                                                     717896-40-7P
                                                                    717896-42-9P
     717896-34-9P
                     717896-36-1P
     717896-44-1P
                     717896-46-3P
                                     717896-48-5P
                                                     717896-51-0P
                                                                    717896-53-2P
     717896-55-4P
                     717896-56-5P
                                     717896-58-7P
                                                     717896-60-1P
                                                                    717896-63-4P
                                                     717896-70-3P
                                                                    717896-72-5P
     717896-65-6P
                     717896-67-8P
                                     717896-68-9P
                                                     717896-81-6P
     717896-74-7P
                     717896-77-0P
                                     717896-79-2P
                                                                    717896-83-8P
                     717896-86-1P
                                     717896-88-3P
                                                     717896-91-8P
                                                                    717896-92-9P
     717896-84-9P
     717896-94-1P
                     717896-95-2P
                                     717896-96-3P
                                                     717896-97-4P
                                                                    717896-99-6P
                                                                    717897-05-7P
     717897-00-2P
                     717897-01-3P
                                     717897-02-4P
                                                     717897-03-5P
     717897-06-8P
                     717897-07-9P
                                     717897-08-0P
                                                     717897-09-1P
                                                                    717897-10-4P
                                                     717897-15-9P
                                                                    717897-16-0P
     717897-11-5P
                     717897-13-7P
                                     717897-14-8P
     717897-17-1P
                     717897-18-2P
                                     717897-19-3P
                                                     717897-21-7P
                                                                    717897-22-8P
                                     717897-25-1P
                                                     717897-26-2P
                                                                    717897-28-4P
     717897-23-9P
                     717897-24-0P
     717897-29-5P
                     717897-30-8P
                                     717897-31-9P
                                                     717897-32-0P
                                                                    717897-33-1P
                     717897-36-4P
     717897-34-2P
                                     717897-37-5P
                                                     717897-38-6P
                                                                    717897-39-7P
                                                                    717897-45-5P
     717897-40-0P
                     717897-41-1P
                                     717897-43-3P
                                                     717897-44-4P
                     717897-47-7P
                                     717897-48-8P
                                                     717897-49-9P
                                                                    717897-51-3P
     717897-46-6P
     717897-52-4P
                     717897-53-5P
                                     717897-54-6P
                                                     717897-55-7P
                                                                    717897-56-8P
     717897-57-9P
                     717897-58-0P
                                     717897-60-4P
                                                     717897-61-5P
                                                                    717897-62-6P
                                                     717897-67-1P
     717897-63-7P
                     717897-64-8P
                                     717897-65-9P
                                                                    717897-68-2P
                     717897-70-6P
                                     717897-71-7P
                                                     717897-72-8P
                                                                     717897-73-9P
     717897-69-3P
                     717897-76-2P
                                     717897-77-3P
                                                     717897-78-4P
                                                                    717897-79-5P
     717897-75-1P
                                     717897-83-1P
                                                     717897-84-2P
                                                                    717897-85-3P
     717897-80-8P
                     717897-82-0P
     717897-86-4P
                     717897-87-5P
                                     717897-88-6P
                                                     717897-90-0P
                                                                    717897-91-1P
                     717897-93-3P
                                     717897-94-4P
                                                     717897-96-6P
                                                                     717897-98-8P
     717897-92-2P
                                     717898-01-6P
                                                     717898-02-7P
     717897-99-9P
                     717898-00-5P
                                                                     717898-03-8P
     717898-05-0P
                     717898-06-1P
                                     717898-07-2P
                                                     717898-08-3P
                                                                     717898-09-4P.
     717898-10-7P
                     717898-12-9P
                                     717898-13-0P
                                                     717898-14-1P
                                                                     717898-15-2P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); USES (Uses)
         (preparation of pyrrolopyrimidines as antiproliferative agents)
IT
     717898-16-3P
                     717898-17-4P
                                     717898-18-5P
                                                     717898-20-9P
                                                                     717898-21-0P
     717898-22-1P
                     717898-23-2P
                                     717898-24-3P
                                                     717898-25-4P
                                                                     717898-26-5P
      717898-27-6P
                     717898-30-1P
                                     717898-31-2P
                                                     717898-32-3P
                                                                     717898-33-4P
     717898-34-5P
                     717898-35-6P
                                     717898-36-7P
                                                     717898-37-8P
                                                                     717898-39-0P
      717898-40-3P
                     717898-41-4P
                                     717898-42-5P
                                                     717898-43-6P
                                                                     717898-44-7P
      717898-45-8P
                     717898-46-9P
                                     717898-48-1P
                                                     717898-49-2P
                                                                     717898-50-5P
      717898-51-6P
                     717898-52-7P
                                     717898-53-8P
                                                     717898-54-9P
                                                                     717898-55-0P
```

```
717898-59-4P
717898-57-2P
               717898-58-3P
                                             717898-60-7P
                                                             717898-61-8P
717898-62-9P
               717898-63-0P
                              717898-64-1P
                                             717898-66-3P
                                                             717898-67-4P
717898-68-5P
               717898-69-6P
                              717898-70-9P
                                             717898-71-0P
                                                             717898-72-1P
717898-73-2P
               717898-74-3P
                              717898-75-4P
                                              717898-76-5P
                                                             717898-78-7P
                              717898-81-2P
717898-79-8P
               717898-80-1P
                                             717898-82-3P
                                                             717898-83-4P
                              717898-87-8P
717898-84-5P
               717898-86-7P
                                             717898-88-9P
                                                             717898-89-0P
717898-90-3P
               717898-91-4P
                              717898-93-6P
                                             717898-94-7P
                                                             717898-95-8P
717898-96-9P
               717898-97-0P
                              717898-98-1P
                                             717899-00-8P
                                                             717899-01-9P
717899-02-0P
               717899-03-1P
                              717899-04-2P
                                              717899-05-3P
                                                             717899-07-5P
717899-08-6P
               717899-09-7P
                              717899-10-0P
                                             717899-11-1P
                                                             717899-12-2P
717899-13-3P
               717899-15-5P
                              717899-16-6P
                                             717899-17-7P
                                                             717899-18-8P
717899-19-9P
               717899-20-2P
                              717899-21-3P
                                             717899-22-4P
                                                             717899-23-5P
717899-24-6P
               717899-25-7P
                              717899-26-8P
                                             717899-27-9P
                                                             717899-29-1P
               717899-31-5P`
                                             717899-33-7P
717899-30-4P
                              717899-32-6P
                                                             717899-34-8P
717899-35-9P
               717899-37-1P
                              717899-38-2P
                                             717899-39-3P
                                                             717899-40-6P
717899-41-7P
               717899-42-8P
                              717899-43-9P
                                              717899-44-0P
                                                             717899-45-1P
717899-47-3P
               717899-48-4P
                              717899-49-5P
                                             717899-50-8P
                                                             717899-51-9P
717899-52-0P
               717899-53-1P
                              717899-54-2P
                                             717899-56-4P
                                                             717899-57-5P
717899-58-6P
               717899-59-7P
                              717899-60-0P
                                             717899-61-1P
                                                             717899-62-2P
717899-63-3P
               717899-65-5P
                              717899-66-6P
                                             717899-67-7P
                                                             717899-68-8P
717899-69-9P
               717899-70-2P
                              717899-71-3P
                                              717899-72-4P
                                                             717899-74-6P
717899-75-7P
               717899-76-8P
                              717899-77-9P 717899-78-0P
                                                             717899-79-1P
717899-80-4P
               717899-82-6P
                              717899-83-7P
                                             717899-84-8P
                                                             717899-85-9P
717899-86-0P
               717899-87-1P
                              717899-88-2P
                                             717899-89-3P
                                                             717899-90-6P
717899-91-7P
               717899-92-8P
                              717899-93-9P
                                             717899-94-0P
                                                             717899-95-1P
717899-96-2P
               717899-97-3P
                              717899-99-5P
                                             717900-00-0P
                                                             717900-01-1P
717900-02-2P
               717900-03-3P
                              717900-04-4P
                                             717900-05-5P
                                                             717900-06-6P
717900-07-7P
               717900-08-8P
                              717900-09-9P
                                             717900-11-3P
                                                             717900-12-4P
717900-13-5P
               717900-14-6P
                              717900-15-7P
                                              717900-16-8P
                                                             717900-18-0P
717900-19-1P
               717900-22-6P
                              717900-24-8P
                                             717900-25-9P
                                                             717900-26-0P
717900-27-1P
               717900-28-2P
                                                             717900-33-9P
                              717900-30-6P
                                             717900-32-8P
717900-34-0P
               717900-35-1P
                              717900-36-2P
                                             717900-37-3P
                                                             717900-38-4P
717900-40-8P
               717900-41-9P
                              717900-42-0P
                                             717900-43-1P
                                                             717900-44-2P
717900-45-3P
               717900-46-4P
                              717900-48-6P
                                             717900-49-7P
                                                             717900-50-0P
717900-51-1P
               717900-52-2P
                              717900-53-3P
                                              717900-54-4P
                                                             717900-55-5P
                                                             717907-93-2P
717900-57-7P
               717900-58-8P
                              717907-91-0P
                                              717907-92-1P
717907-94-3P
               717907-95-4P
                              717907-96-5P
                                             717907-97-6P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
```

study); PREP (Preparation); USES (Uses)

(preparation of pyrrolopyrimidines as antiproliferative agents)

REFERENCE COUNT:

. 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L119 ANSWER 4 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                        2004:203659 HCAPLUS Full-text
ACCESSION NUMBER:
```

DOCUMENT NUMBER:

140:247064

TITLE:

Method using quinolinecarboxamides and other

heterocyclic compounds for preventing or treating

atherosclerosis or restenosis

INVENTOR(S):

Wathen, Michael W.; Wathen, Lynne K. Pharmacia & Upjohn Company, USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 299 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

FAIENI NO.	KIND	DATE	APPLICATION NO.	DATE
PATENT NO.	KIND	DATE	APPLICATION NO.	DAME

```
20040311
                                            WO 2003-US26962
                                                                    20030828 <--
    WO 2004019932
                          A1
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003262947
                          A1
                                20040319
                                            AU 2003-262947
                                                                    20030828 <--
                                                                    20030828 <--
     US 2004186131
                          A1
                                20040923
                                            US 2003-651309
                                            US 2002-407563P
                                                                 P 20020830 <--
PRIORITY APPLN. INFO .:
                                                                P
                                            US 2003-467497P
                                                                    20030502 <--
                                                                 W
                                            WO 2003-US26962
                                                                   20030828 <--
OTHER SOURCE(S):
                         MARPAT 140:247064
     Entered STN: 14 Mar 2004
ED
     The invention provides a method for preventing or treating atherosclerosis or
AB
     restenosis in mammals, which comprises administering an effective amount of a
     quinolinecarboxamide or other heterocyclic compound
IC
     ICM A61K031-33
CC
     1-8 (Pharmacology)
ST
     quinolinecarboxamide atherosclerosis restenosis
     treatment; heterocyclic compd atherosclerosis restenosis
IT
     Antiarteriosclerotics
        (antiatherosclerotics; quinolinecarboxamides and other
        heterocyclic compds. for preventing or treating atherosclerosis
        or restenosis)
ΙT
     Drug delivery systems
        (oral; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
IT
     Drug delivery systems
        (parenterals; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
IT
     Atherosclerosis
       Cardiovascular agents
     Human
     Livestock
     Pet animal
        (quinolinecarboxamides and other heterocyclic compds. for preventing or
        treating atherosclerosis or restenosis)
IT
     Drug delivery systems
        (rectal; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
IT
     Artery, disease
        (restenosis; quinolinecarboxamides and other heterocyclic
        compds. for preventing or treating atherosclerosis or
        restenosis)
IT
     Drug delivery systems
        (topical; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
IT
     Drug delivery systems
         (vaginal; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
```

```
ΙT
     Drugs
        (veterinary; quinolinecarboxamides and other heterocyclic compds. for
        preventing or treating atherosclerosis or restenosis
                                                                228725-37-9
IT
     228725-33-5
                    228725-34-6
                                   228725-35-7
                                                  228725-36-8
                    228725-39-1
                                   228725-40-4
                                                  228725-41-5
                                                                228725-42-6
     228725-38-0
                                                  228725-46-0
                                                                228725-47-1
                                   228725-45-9
     228725-43-7
                    228725-44-8
                    228725-50-6
                                   228725-51-7
                                                  228725-52-8
                                                                 228725-53-9
     228725-48-2
     228725-54-0
                                   228725-56-2
                                                  228725-57-3
                                                                228725-58-4
                    228725-55-1
                                                                228725-63-1
     228725-59-5
                    228725-60-8
                                   228725-61-9
                                                  228725-62-0
     228725-64-2
                    228725-65-3
                                   228725-66-4
                                                  228725-67-5
                                                                 228725-68-6
                                                                 228725-73-3
     228725-69-7
                    228725-70-0
                                   228725-71-1
                                                  228725-72-2
                    228725-75-5
                                   228725-76-6
                                                  228725-77-7
                                                                 228725-78-8
     228725-74-4
     228725-79-9
                    228725-80-2
                                   228725-81-3
                                                  228725-82-4
                                                                 228725-83-5
     228725-84-6
                    228725-85-7
                                   228725-86-8
                                                  228725-87-9
                                                                 228725-88-0
                    228725-90-4
                                   228725-91-5
                                                  228725-92-6
                                                                 228725-93-7
     228725-89-1
                                                  228725-97-1
                                                                 228725-98-2
     228725-94-8
                    228725-95-9
                                   228725-96-0
                    228726-00-9
                                                  228726-02-1
                                                                 228726-03-2
     228725-99-3
                                   228726-01-0
                    228726-05-4
                                   228726-06-5
                                                  228726-07-6
                                                                 228726-08-7
     228726-04-3
                                                  228726-12-3
                                                                 228726-13-4
     228726-09-8
                    228726-10-1
                                   228726-11-2
                                   228726-16-7
                                                  228726-17-8
                                                                 228726-18-9
     228726-14-5
                    228726-15-6
                    228726-20-3
                                   228726-21-4
                                                  228726-22-5
                                                                 228726-23-6
     228726-19-0
                                                                 228726-28-1
                    228726-25-8
                                   228726-26-9
                                                  228726-27-0
     228726-24-7
     228726-29-2
                    228726-30-5
                                   228726-31-6
                                                  228726-32-7
                                                                 228726-33-8
                    228726-35-0
                                   228726-36-1
                                                  228726-37-2
                                                                 228726-38-3
     228726-34-9
                                                                 228726-43-0
                    228726-40-7
                                   228726-41-8
                                                  228726-42-9
     228726-39-4
                                                  228726-47-4
                                                                 228726-48-5
     228726-44-1
                    228726-45-2
                                   228726-46-3
                                                  228726-52-1
                                                                 228726-53-2
     228726-49-6
                    228726-50-9
                                   228726-51-0
                    228726-55-4
                                   228726-57-6
                                                  228726-58-7
                                                                 228726-59-8
     228726-54-3
                                                  228726-63-4
                                                                 228726-64-5
                    228726-61-2
                                   228726-62-3
     228726-60-1
                                                                 228726-69-0
     228726-65-6
                    228726-66-7
                                   228726-67-8
                                                  228726-68-9
                                                  228726-73-6
                                                                 228726-74-7
     228726-70-3
                    228726-71-4
                                   228726-72-5
                                   228726-77-0
                                                  228726-78-1
                                                                 228726-79-2
     228726-75-8
                    228726-76-9
                                                  228726-85-0
                                                                 228726-86-1
     228726-80-5
                    228726-83-8
                                   228726-84-9
     228726-87-2
                    228726-90-7
                                   228726-91-8
                                                  228726-92-9
                                                                 228726-93-0
     228726-94-1
                    228726-95-2
                                   228726-96-3
                                                  228726-97-4
                                                                 228726-98-5
     228727-00-2
                                                                 228727-04-6
                    228727-01-3
                                   228727-02-4
                                                  228727-03-5
                                                  228727-08-0
                                                                 228727-09-1
     228727-05-7
                    228727-06-8
                                   228727-07-9
                    228727-11-5
                                   228727-12-6
                                                  228727-13-7
                                                                 228727-14-8
     228727-10-4
     228727-15-9
                    228727-16-0
                                   228727-17-1
                                                  228727-18-2
                                                                 228727-19-3
     228727-20-6
                    228727-21-7
                                   228727-22-8
                                                  228727-23-9
                                                                 228727-24-0
                                                                 228727-29-5
     228727-25-1
                    228727-26-2
                                   228727-27-3
                                                  228727-28-4
                                                  228727-33-1
                                                                 228727-34-2
     228727-30-8
                    228727-31-9
                                   228727-32-0
                                                                 228727-39-7
                                   228727-37-5
                                                  228727-38-6
     228727-35-3
                    228727-36-4
                                                                 228727-44-4
     228727-40-0
                    228727-41-1
                                   228727-42-2
                                                  228727-43-3
                    228727-47-7
                                   228727-48-8
                                                  228727-49-9
                                                                 228727-50-2
     228727-46-6
                    228727-52-4
                                   228727-53-5
                                                  228727-54-6
                                                                 228727-55-7
     228727-51-3
                    228727-57-9
                                   228727-58-0
                                                  228727-59-1
                                                                 228727-60-4
     228727-56-8
     228727-61-5
                    228727-62-6
                                   228727-63-7
                                                  228727-64-8
                                                                 228727-65-9
     228727-66-0
                    228727-67-1
                                   228727-68-2
                                                  228727-69-3
                                                                 228727-70-6
     228727-71-7
                                                  228727-74-0
                    228727-72-8
                                   228727-73-9
                                                                 228727-75-1
     RL: AGR (Agricultural use); PAC (Pharmacological activity); THU
      (Therapeutic use); BIOL (Biological study); USES (Uses)
         (quinolinecarboxamides and other heterocyclic compds. for preventing or
         treating atherosclerosis or restenosis)
IT
     228727-76-2
                    228727-77-3
                                   228727-78-4
                                                  228727-79-5
                                                                 228727-80-8
                                                                 228727-85-3
     228727-81-9
                    228727-82-0
                                   228727-83-1
                                                  228727-84-2
                                                  228727-90-0
                                                                 228727-91-1
                    228727-87-5
                                   228727-89-7
     228727-86-4
                                   228727-94-4
                                                  228727-95-5
                                                                 228727-96-6
     228727-92-2
                    228727-93-3
```

228728-00-5

228728-01-6

228727-99-9

228727-97-7

ΙT

228727-98-8

```
281650-67-7
                             281650-68-8
                                            281650-69-9
                                                           281650-71-3
281650-66-6
                             281650-74-6
                                            281650-75-7
                                                           281650-76-8
281650-72-4
              281650-73-5
                             281650-79-1
                                            281650-80-4
                                                           281650-81-5
281650-77-9
              281650-78-0
              281650-83-7
                                                           281650-86-0
                             281650-84-8
                                            281650-85-9
281650-82-6
                                            281650-90-6
                                                           281650-91-7
281650-87-1
              281650-88-2
                             281650-89-3
281650-92-8
              281650-93-9
                             281650-94-0
                                            281650-95-1
                                                           281650-96-2
281650-97-3
              281650-98-4
                             281650-99-5
                                            281651-01-2
                                                           281651-02-3
                                            281651-06-7
                                                           281651-07-8
281651-03-4
              281651-04-5
                             281651-05-6
                             281651-10-3
                                            281651-11-4
                                                           281651-12-5
281651-08-9
              281651-09-0
                                                           281651-18-1
281651-14-7
              281651-15-8
                             281651-16-9
                                            281651-17-0
281651-19-2
              281651-20-5
                             281651-21-6
                                            281651-22-7
                                                           281651-23-8
                                                           281651-28-3
281651-24-9
              281651-25-0
                             281651-26-1
                                            281651-27-2
                                            281651-32-9
                                                           281651-33-0
281651-29-4
              281651-30-7
                             281651-31-8
281651-34-1
              281651-35-2
                             281651-36-3
                                            281651-37-4
                                                           281651-38-5
281651-39-6
              281651-40-9
                             281651-41-0
                                            281651-42-1
                                                           281651-43-2
                                                           281651-48-7
281651-44-3
              281651-45-4
                             281651-46-5
                                            281651-47-6
                                            281651-50-1
                                                           281651-51-2
281651-48-7
              281651-49-8
                             281651-49-8
              281651-52-3
                             281651-52-3
                                            281651-53-4
                                                           281651-54-5
281651-51-2
                                            281651-56-7
                                                           281651-56-7
281651-54-5
              281651-55-6
                             281651-55-6
281651-57-8
              281651-58-9
                             281651-59-0
                                            281651-60-3
                                                           281651-61-4
281651-62-5
              281651-63-6
                             281651-64-7
                                            281651-65-8
                                                           281651-66-9
281651-67-0
              281651-68-1
                             281651-69-2
                                            281651-70-5
                                                           281651-71-6
281651-72-7
              281651-73-8
                             281651-74-9
                                            281651-75-0
                                                           281651-76-1
281651-77-2
              281651-78-3
                             281651-79-4
                                            281651-80-7
                                                           281651-81-8
                                            281651-85-2
                                                           281651-86-3
281651-82-9
              281651-83-0
                             281651-84-1
                             281651-89-6
                                            281652-04-8
                                                           281652-08-2
281651-87-4
              281651-88-5
              281652-43-5
                             281652-43-5
                                            281652-64-0
                                                           281652-65-1
281652-16-2
281652-66-2
              281652-67-3
                             281652-68-4
                                            281652-69-5
                                                           282536-21-4
282536-25-8
              282536-28-1
                             282536-38-3
                                            282536-43-0
                                                           282536-47-4
                             333780-68-0
                                            333780-69-1
                                                           382604-97-9
333780-66-8
              333780-67-9
382604-98-0
               382604-99-1
                             382605-01-8
                                            382605-02-9
                                                           382605-03-0
                                            382605-07-4
                                                           382605-08-5
382605-04-1
               382605-05-2
                             382605-06-3
                                            382605-12-1
382605-09-6
               382605-10-9
                             382605-11-0
                                                           382605-13-2
                             382605-16-5
                                            382605-17-6
                                                           382605-19-8
382605-14-3
               382605-15-4
382605-20-1
               382605-21-2
                             382605-22-3
                                            382605-23-4
                                                           382605-24-5
382605-25-6
               382605-26-7
                             382605-27-8
                                            382605-28-9
                                                           389133-56-6
                                            389133-60-2
389133-57-7
                                                           389133-61-3
               389133-58-8
                             389133-59-9
389133-62-4
               389133-63-5
                             389133-64-6
                                            389133-65-7
                                                           389133-66-8
389133-67-9
               389133-68-0
                             389133-69-1
                                            389133-70-4
                                                           389133-71-5
                                            389133-79-3
389133-72-6
               389133-73-7
                             389133-74-8
                                                           389133-80-6
                                            389133-84-0
389133-81-7
               389133-82-8
                             389133-83-9
                                                           389133-85-1
389133-86-2
               389133-88-4
                             389133-90-8
                                            389133-91-9
                                                           389133-92-0
RL: AGR (Agricultural use); PAC (Pharmacological activity); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
   (quinolinecarboxamides and other heterocyclic compds. for preventing or
   treating atherosclerosis or restenosis)
               389133-94-2
                             389133-95-3
389133-93-1
                                            389133-96-4
                                                           389133-97-5
389133-98-6
               389133-99-7
                             389134-00-3
                                            389134-01-4
                                                           389134-02-5
389134-03-6
               389134-04-7
                             389134-05-8
                                            389134-06-9
                                                           389134-07-0
389134-08-1
               389134-09-2
                             389134-10-5
                                            389134-11-6
                                                           389134-12-7
389134-13-8
               389134-14-9
                             389134-15-0
                                            389134-16-1
                                                           389134-17-2
389134-18-3
               389134-19-4
                             389134-20-7
                                            389134-21-8
                                                           389134-22-9
389134-23-0
               389134-24-1
                             389134-25-2
                                            389134-26-3
                                                           389134-27-4
                             389134-90-1
389134-28-5
               389134-89-8
                                            389134-91-2
                                                           389134-92-3
389134-93-4
               389134-94-5
                             389134-95-6
                                            389134-96-7
                                                           389134-97-8
389134-98-9
               389134-99-0
                             389135-00-6
                                            389135-01-7
                                                           389135-02-8
               389135-04-0
                             389135-05-1
                                                           389135-07-3
389135-03-9
                                            389135-06-2
389135-08-4
               389135-09-5
                             389135-10-8
                                            389135-11-9
                                                           389135-12-0
389135-13-1
               389135-14-2
                             389135-16-4
                                            389135-17-5
                                                           389135-18-6
```

```
10/574,993
     389135-19-7
                   389135-20-0
                                 389135-21-1
                                               389135-22-2
                                                             389135-23-3
     389135-24-4
                   389135-25-5
                                 389135-26-6
                                               389135-27-7 . 389135-28-8
     389135-29-9
                                 389135-31-3
                   389135-30-2
                                               389135-32-4
                                                             389135-33-5
     389135-34-6
                   389135-35-7
                                 389135-36-8
                                               389135-37-9
                                                             389135-38-0
     389135-39-1
                   389135-40-4
                                 389135-41-5
                                               389135-42-6
                                                             389135-43-7
     389135-44-8
                   389135-45-9
                                 389135-46-0
                                               389135-47-1
                                                             389135-48-2
     389135-49-3
                   389135-50-6
                                 389135-51-7
                                               389135-52-8
                                                             669051-10-9
     669051-11-0
                   669051-12-1
                                 669051-13-2
                                               669051-14-3
                                                             669051-15-4
     669051-16-5
                   669051-17-6
                                 669051-18-7
                                               669051-24-5
                                                             669051-40-5
     669051-42-7
                   669051-43-8
                                 669051-44-9
                                               669051-45-0
                                                             669051-46-1
                                               669051-50-7
     669051-47-2
                   669051-48-3
                                 669051-49-4
                                                             669051-51-8
     669051-52-9
                   669051-53-0
                                 669051-54-1
                                               669051-55-2
                                                             669051-56-3
     669051-60-9
                   669051-61-0
                                 669051-63-2
                                               669051-64-3
                                                             669051-73-4
     669051-74-5
                   669051-75-6
                                 669051-76-7
                                               669051-78-9
     RL: AGR (Agricultural use); PAC (Pharmacological activity); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (quinolinecarboxamides and other heterocyclic compds. for preventing or
        treating atherosclerosis or restenosis)
REFERENCE COUNT:
                         8
                               THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 5 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2004:182874 HCAPLUS Full-text
DOCUMENT NUMBER:
                         140:235742
TITLE:
                         Preparation of quinazolinones as inosine
                         5'-monophosphate dehydrogenase (IMPDH) inhibitors.
INVENTOR(S):
                         Haughan, Alan Findlay; Buckley, George Martin; Dyke,
                         Hazel Joan; Hannah, Duncan Robert; Richard, Marianna
                         Dilani; Sharpe, Andrew; Williams, Sophie Caroline
PATENT ASSIGNEE(S):
                         Celltech R & D Limited, UK
SOURCE:
                         PCT Int. Appl., 81 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                  DATE
                                            ______
                                                                   -----
                                20040304
     WO 2004018462
                          A1
                                           WO 2003-GB3600
                                                                   20030818 <--
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003255803
                          A1
                               20040311
                                            AU 2003-255803
                                                                   20030818 <--
PRIORITY APPLN. INFO.:
                                                                A 20020823.<--
                                            GB 2002-19638
```

OTHER SOURCE(S): MARPAT 140:235742

ED Entered STN: 05 Mar 2004

AB Title compds. [I; X = 0, S; R1 = aliphatic, cycloaliph., cycloalkylalkyl; R2 = (substituted) heteroaryl, cyano; R3 = (Alk1)mL1(Alk2)nR6; m, n, p, q = 0, 1; Alk1-Alk4 = (substituted) aliphatic, heteroaliph. chain; L1, L2 = bond, linker

GB 2003-3866

GB 2003-12773

WO 2003-GB3600

A 20030220 <--

A 20030604 <--W 20030818 <-- IC

CC

ST

IT

IT

IT

IT

IT

IT

IT

inhibitors)

65-85-0, Benzoic acid, reactions

```
atom or group; R6 = H, (substituted) cycloaliph., heterocycloaliph., aryl,
heteroaryl; R4 = (Alk3)pL2(Alk4)qR7; R7 = H, halo, cyano, (substituted)
cycloaliph., heterocycloaliph., aryl, heteroaryl; R5 = H, (substituted)
aliphatyl; and the salts, solvates, hydrates, tautomers, <u>isomers</u> or N-oxides
thereof], were prepared Thus, 2-amino-4-methoxy-N-(2-morpholin-4-ylethyl)-5-
oxazol- 5-ylbenzamide (preparation given) was refluxed 6 h with MgSO4 and p-
TsOH in acetone to give 16% 7-methoxy-2,2-dimethyl-3-(2-morpholin-4- ylethyl)-
6-oxazol-5-yl-2,3-dihydro-1H-quinazolin-4-one. I inhibited IMPDH with IC50≤ 5
μΜ.
ICM C07D413-04
ICS
    C07D413-14; A61K031-517
28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
quinazolinone prepn inosine monophosphate dehydrogenase IMPDH
inhibitor; cancer inflammation autoimmune disorder
psoriasis viral disorder treatment quinazolinone
Immune system
   (agents; preparation of quinazolinones as IMP dehydrogenase
   (IMPDH) inhibitors)
Anti-inflammatory agents
  Antitumor agents
Antiviral agents
Human
   (preparation of quinazolinones as IMP dehydrogenase (IMPDH)
   inhibitors)
Autoimmune disease
Inflammation
  Neoplasm
Psoriasis
   (treatment; preparation of quinazolinones as IMP dehydrogenase
   (IMPDH) inhibitors)
Infection
   (viral, treatment; preparation of quinazolinones as IMP
   dehydrogenase (IMPDH) inhibitors)
9028-93-7, Inosine 5'-monophosphate dehydrogenase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
   (inhibitors; preparation of quinazolinones as IMP dehydrogenase
   (IMPDH) inhibitors)
667939-11-9P
               667939-12-0P
                               667939-13-1P
                                              667939-14-2P
                                                              667939-15-3P
                                              667939-19-7P
                                                              667939-20-0P
667939-16-4P
               667939-17-5P
                               667939-18-6P
                               667939-23-3P
                                              667939-24-4P
                                                              667939-25-5P
               667939-22-2P
667939-21-1P
                               667939-28-8P
                                              667939-29-9P
                                                              667939-30-2P
667939-26-6P
               667939-27-7P
               667939-32-4P
                               667939-33-5P
                                              667939-34-6P
                                                              667939-35-7P
667939-31-3P
               667939-37-9P
                               667939-38-0P
                                              667939-39-1P
                                                              667939-40-4P
667939-36-8P
667939-41-5P
               667939-42-6P
                               667939-43-7P
                                              667939-44-8P
                                                              667939-45-9P
667939-46-0P
               667939-47-1P
                               667939-48-2P
                                              667939-49-3P
                                                              667939-50-6P
667939-51-7P
               667939-52-8P
                               667939-53-9P
                                              667939-54-0P
                                                              667939-55-1P
               667939-57-3P
                               667939-58-4P
                                              667939-59-5P
                                                              667939-60-8P
667939-56-2P
                               667939-63-1P
                                              667939-64-2P
                                                              667939-65-3P
667939-61-9P
               667939-62-0P
               667939-67-5P
                               667939-68-6P
                                              667939-69-7P
                                                              667939-70-0P
667939-66-4P
                               667939-73-3P
                                              667939-74-4P
                                                              667939-75-5P
667939-71-1P
               667939-72-2P
               667939-77-7P
                               667939-78-8P
                                              667939-79-9P
                                                              667939-80-2P
667939-76-6P
667939-81-3P
               667939-82-4P
                               667939-83-5P
                                              667939-84-6P
                                                              667939-85-7P
668486-10-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
    (preparation of quinazolinones as IMP dehydrogenase (IMPDH)
```

67-64-1, Acetone,

```
75-07-0, Acetaldehyde, reactions
                                                  98-01-1,
    2-Furaldehyde, reactions
                              98-89-5, Cyclohexanecarboxylic acid
    100-52-7, Benzaldehyde, reactions
                                      100-61-8, N-Methylaniline,
                105-45-3, Methyl acetoacetate
                                               110-89-4, Piperidine,
    reactions
                127-17-3, Pyruvic acid, reactions
    421-50-1, 1,1,1-Trifluoroacetone
                                      563-96-2, Glyoxylic acid monohydrate
    593-51-1, Methylamine hydrochloride 617-35-6, Ethyl pyruvate 621-87-4,
                     623-15-4, 4-(2-Furyl)-3-buten-2-one
                                                         924-44-7, Ethyl
    Phenoxyacetone
    glyoxylate 943-88-4 1011-47-8 1071-73-4, 3-Acetyl-1-propanol
    1121-60-4, 2-Pyridinecarboxaldehyde 1439-36-7, 1-
                                                        1646-26-0,
    Triphenylphosphoranylidene-2-propanone
                                            1611-38-7
    Benzofuran-2-yl methyl ketone 1646-32-8, 2-Acetyl-5-chlorobenzofuran
    1817-57-8, 4-Phenyl-3-butyn-2-one
                                       1896-62-4
                                                  2038-03-1,
    4-Morpholineethanamine 2833-24-1
                                        2987-16-8
                                                    3160-40-5
                                                                3783-77-5,
    N-(3-Oxobutyl)phthalimide 4244-84-2, \beta-Alanine ethyl ester
    hydrochloride 4265-16-1, 2-Benzofurancarboxaldehyde 4436-81-1
    5813-64-9, Neopentylamine 5878-19-3, Methoxyacetone
                                                           5930-98-3,
    4-Trimethylsilyl-3-butyn-2-one 7152-32-1
                                                7797-83-3,
    1,3-Benzodioxole-4-carboxaldehyde 10412-98-3, 5-Oxohexanenitrile
    10601-80-6, Ethyl (3,3-diethoxy) propionate 13258-63-4,
    4-(2-Aminoethyl)pyridine 13750-81-7, 1-Methyl-2-imidazolecarboxaldehyde
    13803-39-9, 5-Phenylfuran-2-carboxaldehyde 13939-69-0,
    1-Piperidinecarbonyl chloride
                                  14063-86-6
                                                20306-75-6,
    N-Methylacetoacetamide
                            22539-93-1, Benzyloxyacetone 23100-12-1,
    2-Chloropyridine-5-carboxaldehyde 25784-83-2
                                                    27421-51-8,
    1-Methylindole-2-carboxaldehyde 27861-32-1 28447-16-7
                                                               33016-47-6,
    1-Tritylimidazole-4-carboxaldehyde 33603-63-3 34047-39-7,
    4-Methylthio-2-butanone 43071-52-9, 2-Acetyl-7-methoxybenzofuran
    54614-95-8
               55728-58-0
                              65308-89-6 67808-66-6, Methyl
     5-formyl-3-thiophenecarboxylate
                                      70661-09-5 75277-96-2
                                                               81559-89-9
     93668-43-0 107624-85-1 371251-38-6
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of quinazolinones as IMP dehydrogenase (IMPDH)
       inhibitors)
    553677-82-0P
                  667939-86-8P
                                  667939-87-9P
                                                 667939-88-0P
                                                               667939-89-1P
     667939-90-4P
                   667939-91-5P
                                  667939-92-6P
                                                 667939-93-7P
                                                               667939-94-8P
                                  667939-97-1P
     667939-95-9P
                   667939-96-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of quinazolinones as IMP dehydrogenase (IMPDH)
       inhibitors)
REFERENCE COUNT:
                        2
                              THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 6 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2004:60309 HCAPLUS Full-text
DOCUMENT NUMBER:
                        140:105273
TITLE:
                        Topical treatment of skin diseases
INVENTOR(S):
                        Rundfeldt, Chris; Kietzmann, Manfred; Hoppmann,
                        Joachim; Baeumer, Wolfgang; Kuss, Hildegard; Hoefgen,
                        Norbert
PATENT ASSIGNEE(S):
                        Elbion AG, Germany
SOURCE:
                        PCT Int. Appl., 48 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
```

ΙT

PATENT NO. KIND DATE APPLICATION NO. DATE

```
WO 2004006920
                                20040122
                                            WO 2003-EP7514
                                                                    20030710 <--
                          A1
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                20040226
                                           US 2003-611649
                                                                    20030701 <--
    US 2004038958
                          Α1
     CA 2492093
                          A1
                                20040122
                                            CA 2003-2492093
                                                                    20030710 <--
     AU 2003254332
                          A1
                                20040202
                                            AU 2003-254332
                                                                    20030710 <--
     BR 2003012696
                          Α
                                20050426
                                            BR 2003-12696
                                                                    20030710 <--
     EP 1531818
                          A1
                                20050525
                                            EP 2003-763810
                                                                    20030710 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     CN 1681500
                          Α
                                20051012
                                            CN 2003-821520
                                                                    20030710 <--
     JP 2005537262
                          Т
                                20051208
                                            JP 2004-520586
                                                                    20030710 <--
     NZ 537482
                          Α
                                20060929
                                            NZ 2003-537482
                                                                    20030710 <--
     ZA 2005000108
                          Α
                                20050223
                                            ZA 2005-108
                                                                    20050106 <--
                                            NO 2005-718
     NO 2005000718
                          Α
                                20050401
                                                                    20050210 <--
                                            US 2002-395221P
                                                                 P 20020711 <--
PRIORITY APPLN. INFO.:
                                            WO 2003-EP7514
                                                                 W 20030710 <--
OTHER SOURCE(S):
                         MARPAT 140:105273
ED
     Entered STN: 26 Jan 2004
     The present invention relates to a method for the treatment of an inflammatory
ΑB
     and/or allergic skin disease comprising topically administering a substituted
     hydroxy indole which is a phosphodiesterase 4 inhibitor. Examples are
     provided of the topical effectiveness of AWD 12-281 and cilomilast in dermal
     immunol. inflammation.
     ICM A61K031-4439
IC
     ICS A61P017-00
CC
     1-7 (Pharmacology)
ST
     phosphodiesterase inhibitor topical hydroxy indole skin
     inflammation
ΙT
     Allergy
        (allergic dermatitis; phosphodiesterase inhibitors for
        treatment of skin inflammatory and/or allergic
        reactions)
IT
     Dermatitis
        (allergic; phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
IT
     Dermatitis
        (phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
     Interleukin 4
IT
     Interleukin 6
     Macrophage inflammatory protein 2
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
ΙT
     Corticosteroids, biological studies
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
         (phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
ΙT
     Drug delivery systems
         (topical; phosphodiesterase inhibitors for treatment of skin
```

```
inflammatory and/or allergic reactions)
IT
     60-92-4, Camp 9036-21-9, Phosphodiesterase IV
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
                              257892-33-4, AWD 12-281
     153259-65-5, Cilomilast
TΤ
     RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (phosphodiesterase inhibitors for treatment of skin
        inflammatory and/or allergic reactions)
REFERENCE COUNT:
                               THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 7 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                         2004:60255 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         140:105258
TITLE:
                         Benzimidazole compound-pentamidine compound
                         combinations for the treatment of neoplasms
INVENTOR(S):
                         Borisy, Alexis; Keith, Curtis; Foley, Michael A.;
                         Stockwell, Brent R.; Gaw, Debra A.
PATENT ASSIGNEE(S):
                         Combinatorx, Incorporated, USA
SOURCE:
                         PCT Int. Appl., 79 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                         KIND
                                DATE
     PATENT NO.
                                           APPLICATION NO.
                                                                   DATE
                                            ______
     WO 2004006849
                                20040122
                                           WO 2003-US21984
                          A2
                                                                   20030715 <--
     WO 2004006849
                         A3
                                20040603
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
             FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003251904
                         A1
                                20040202
                                            AU 2003-251904
                                                                   20030715 <--
PRIORITY APPLN. INFO.:
                                            US 2002-396151P
                                                               P 20020715 <--
                                            WO 2003-US21984
                                                              W 20030715 <--
                         MARPAT 140:105258
OTHER SOURCE(S):
     Entered STN: 26 Jan 2004
AB
     The invention features a method for treating a patient having a cancer or
     other neoplasm, by administering to the patient (i) a benzimidazole or a
     metabolite or analog thereof; and (ii) pentamidine or a metabolite or analog
     thereof simultaneously or within 14 days of each other in amts. sufficient to
     inhibit the growth of the neoplasm.
IC
     ICM A61K
     1-6 (Pharmacology)
CC
     benzimidazole compd pentamidine compd combination neoplasm
     treatment; antitumor benzimidazole compd pentamidine compd
     combination
IT
     Bone, neoplasm
```

(Ewing's sarcoma; benzimidazole compound-pentamidine compound

combinations for the treatment of neoplasms)

10/574,993 ΙT (Ewing's; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT (Kaposi's; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Lymphoproliferative disorders (Waldenstrom's macroglobulinemia; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Kidney, neoplasm (Wilms'; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Nerve, neoplasm (acoustic neuroma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Acute myeloid leukemia (acute erythroblastic leukemia, acute; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Carcinoma Lung, neoplasm (adenocarcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Neuroglia, neoplasm (astrocytoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Skin, neoplasm (basal cell carcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Carcinoma (basal cell; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) Acute lymphocytic leukemia ΙT Acute monocytic leukemia Acute myeloid leukemia Acute myelomonocytic leukemia Acute promyelocytic leukemia Antitumor agents Carcinoma Chronic lymphocytic leukemia Chronic myeloid leukemia **Drug** delivery systems Drug interactions Drug screening Hodgkin's disease Human Leukemia Leukemia Mammary gland, neoplasm Melanoma

Neoplasm

Neuroglia, neoplasm

Ovary, neoplasm

Pancreas, neoplasm

Polycythemia vera

Prostate gland, neoplasm

Testis, neoplasm

Uterus, neoplasm

(benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Biliary tract, neoplasm

(bile duct, carcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(bladder; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(bronchial; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Bladder, neoplasm

Bronchi, neoplasm

Lung, neoplasm

Sebaceous gland

Sweat gland

(<u>carcinoma</u>; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Sarcoma

(cartilage chondrosarcoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Uterus, neoplasm

(cervix; benzimidazole compound-pentamidine compound combinations for the treatment of  $\frac{1}{1}$ 

IT Carcinoma

(choledochal; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Cartilage, neoplasm

(chondrosarcoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Neoplasm

(chordoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT <u>Carcinoma</u>

Chorion, neoplasm

(<a href="mailto:compound-pentamidine">compound-pentamidine</a> compound combinations for the treatment of <a href="mailto:neoplasms">neoplasms</a>)

IT Intestine, neoplasm

(colon, carcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(colon; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Neoplasm

(craniopharyngioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Ovary, neoplasm

(cystadenocarcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(embryonal; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Brain, neoplasm

(ependymoma; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Sarcoma

(<u>fibrosarcoma</u>; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Disease, animal

(heavy chain <u>disease</u>; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Blood vessel, neoplasm

(hemangioblastoma; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Blood vessel, neoplasm

#### Sarcoma

(hemangiosarcoma, lymphangiosarcoma; benzimidazole

compound-pentamidine compound combinations for the treatment of

neoplasms)

IT Blood vessel, neoplasm

Sarcoma

(<a href="https://example.com/hemangiosarcoma">hemangiosarcoma</a>; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(hepatocellular; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Liver, neoplasm

(hepatoma; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Drug delivery systems

(inhalants; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Drug delivery systems

(injections, i.m.; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT **Drug** delivery systems

(injections, i.v.; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(large cell; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Myoma

Sarcoma

(<u>leiomyosarcoma</u>; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Adipose tissue, neoplasm

Sarcoma

(<u>liposarcoma</u>; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Sarcoma

(lymphangioendotheliosarcoma; benzimidazole

compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(medullary; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Brain, neoplasm

(medulloblastoma; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Nervous system, neoplasm

(meningioma; benzimidazole compound-pentamidine compound combinations for the treatment of  $\underline{{\tt neoplasms}})$ 

IT Mesothelium, neoplasm

(mesothelioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Sarcoma

(myxosarcoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Astrocyte

(<u>neoplasm</u>, astrocytoma; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Notochord

10/574,993 (neoplasm, chordoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Meninges (neoplasm, meningioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Oligodendrocyte (neoplasm, oligodendroglioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Schwann cell (neoplasm, schwannoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Nerve, neoplasm (neuroblastoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ITLymphoma (non-Hodgkin's; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Neuroglia, neoplasm (oligodendroglioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT **Drug** delivery systems (oral; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Bone, neoplasm Sarcoma (osteosarcoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) ΙT Carcinoma (ovarian cystadenocarcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) Thyroid gland, neoplasm ΙT (papillary carcinoma, adenocarcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Thyroid gland, neoplasm (papillary carcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT Pineal gland (pinealoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT (pulmonary adenocarcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT (pulmonary small-cell; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) IT (pulmonary; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms) **Drug** delivery systems TΤ

(rectal; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Kidney, neoplasm

(renal cell carcinoma; benzimidazole
compound-pentamidine compound combinations for the treatment of
neoplasms)

IT Carcinoma

(<u>renal</u> cell; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Eye, neoplasm

(retinoblastoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Sarcoma

(<a href="mailto:rhabdomyosarcoma">rhabdomyosarcoma</a>; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Nervous system, neoplasm

(schwannoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Testis, neoplasm

(seminoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Lung, neoplasm

(small-cell carcinoma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(squamous cell; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT Neoplasm

(synovioma; benzimidazole compound-pentamidine compound combinations for the treatment of neoplasms)

IT Carcinoma

(thyroid papillary, <a href="mailto:adenocarcinoma">adenocarcinoma</a>; benzimidazole compound-pentamidine compound combinations for the treatment of <a href="mailto:neoplasms">neoplasms</a>)

IT Carcinoma

(thyroid papillary; benzimidazole compound-pentamidine compound combinations for the treatment of **neoplasms**)

IT 51-17-2D, Benzimidazole, derivs. 60-56-0, Mercazole 100-33-4, 100-33-4D, Pentamidine, derivs. 101-62-2, Phenamidine Pentamidine 104-32-5, Propamidine 122-06-5, Stilbamidine 140-64-7, Pentamidine isethionate 148-79-8, Thiabendazole 495-99-8, Hydroxystilbamidine 536-71-0, Diminazene 548-73-2, Droperidol 496-00-4, Dibrompropamidine 1402-38-6, Actinomycin 1438-30-8, Netropsin 618-39-3, Benzamidine 3459-96-9, Amicarbalide 1929-88-0, Benzthiazuron 2062-78-4, Pimozide 11056-06-7, Bleomycin 6306-71-4, Lobendazole 14255-87-9, Parbendazole 17804-35-2, Benomyl 18691-97-9, Methabenzthiazuron 20559-55-1, 20830-81-3, Daunorubicin 24370-25-0, 2-Benzimidazolylurea Oxibendazole 26097-80-3, Cambendazole 26130-02-9, Frentizole 31430-15-6, 31430-18-9, Nocodazole 31431-39-7, Mebendazole Flubendazole 31431-39-7D, Mebendazole, derivs. 31431-43-3, Cyclobendazole 33763-36-9, 3,7-Dibenzofurandicarbonitrile 33016-12-5, TN-16 41738-62-9, 3,7-Dibenzothiophenedicarbonitrile 39389-47-4, Distamycin 41738-64-1, 3,7-Dibenzothiophenediamine 43210-67-9, Fenbendazole 53716-50-0, Oxfendazole 54029-12-8, Albendazole sulfoxide 54965-21-8D, Albendazole, derivs. 57808-66-9, Domperidone Albendazole 61570-90-9, Tioxidazole 68844-77-9, Astemizole 66639-24-5 67019-91-4 73590-58-6, Omeprazole 73819-26-8 74733-75-8 75184-71-3, Albendazole sulfone 75846-15-0 75846-16-1 80434-77-1, NSC 181928 80498-71-1 80498-74-4 83834-10-0 90509-02-7, Luxabendazole 91371-12-9 94345-47-8, Heptamidine 100562-53-6 101689-95-6 116644-53-2, Mibefradil 124076-61-5, Butamidine 124076-65-9 148344-21-2 157168-43-9 157168-44-0 157168-41-7 157168-42-8 157168-45-1 157168-46-2 157168-47-3 157168-48-4 157168-49-5 157168-50-8 161374-52-3, Nonamidine 165596-46-3. 157168-51-9 160522-89-4 166601-10-1 168637-58-9 173420-56-9 166601-05-4 166601-11-2 173420-58-1 173420-61-6 173420-63-8 179118-03-7 179118-04-8 179118-05-9 179118-08-2 179118-10-6 179118-22-0 186395-09-5

```
186395-18-6
                  186395-20-0
                                186395-22-2
                                             186395-24-4
                                                           186395-25-5
    186395-26-6
                  186395-28-8
                                186395-29-9
                                             186395-30-2
                                                           190958-06-6
                                200878-34-8
                                             212829-50-0
                                                           213972-16-8
    190958-12-4
                  190958-16-8
    216308-12-2
                  216308-13-3
                                216308-14-4
                                             216308-16-6
                                                           216308-18-8
                  216502-99-7
                                216503-00-3
                                             216503-01-4
                                                           216503-02-5
    216502-98-6
                                216503-07-0
                                             216503-08-1
                                                           216503-09-2
    216503-05-8
                  216503-06-9
    219483-82-6
                  232940-82-8, 2,8-Dibenzofurandicarbonitrile
                                                               232940-83-9
    232940-84-0
                  247032-11-7
                                247032-13-9 247032-15-1
                                                           247032-16-2
                                338945-24-7, 2,8-Dibenzofurandicarboximidamide
    247032-17-3
                  247032-18-4
                415718-17-1
                                415718-20-6 415718-26-2 415718-29-5
    415718-14-8
    415718-32-0, 2,8-Dibenzothiophenedicarboximidamide 415718-35-3
    415718-41-1, 3,7-Dibenzothiophenedicarboximidamide 415718-44-4
    415718-47-7
                415718-50-2
                                442842-45-7
                                            648415-30-9
                                                           648415-31-0
                  648415-33-2
                                648415-34-3
                                             648415-36-5
                                                           648415-37-6
    648415-32-1
                  648415-39-8 648415-40-1
                                             648415-41-2
    648415-38-7
                                                           648415-42-3
                  648415-44-5
    648415-43-4
                                648415-45-6
                                              648415-46-7
                                                           648415-47-8
                  648415-49-0 648415-50-3
    648415-48-9
                                              648415-51-4
                                                           648415-52-5
                  648415-54-7
                                648415-55-8
                                              648415-56-9
                                                           648415-58-1
    648415-53-6
    648415-59-2
    RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (benzimidazole compound-pentamidine compound combinations for the treatment
       of neoplasms)
L119 ANSWER 8 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2002:736248 HCAPLUS Full-text
DOCUMENT NUMBER:
                        137:262954
                        Process for producing sulfone derivative
TITLE:
                        Mizufune, Hideya; Yamamoto, Hiroaki; Miki, Shokyo
INVENTOR(S):
                        Takeda Chemical Industries, Ltd., Japan
PATENT ASSIGNEE(S):
SOURCE:
                        PCT Int. Appl., 89 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                        APPLICATION NO.
     PATENT NO.
                        KIND
                               DATE
                                                                 DATE
                        ____
                                          _____
                               _____
                               20020926
                                         WO 2002-JP2323
                                                                 20020313 <--
    WO 2002074762
                        A1
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL,
            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZM, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                               20021003
                                        AU 2002-238857
                                                                 20020313 <--
     AU 2002238857
                         A1
                                           JP 2002-70442
     JP 2002338565
                         Α
                               20021127
                                                                 20020314 <--
                                                              A 20010315 <--
PRIORITY APPLN. INFO .:
                                           JP 2001-74010
                                                             W 20020313 <--
                                           WO 2002-JP2323
                        MARPAT 137:262954
OTHER SOURCE(S):
     Entered STN: 27 Sep 2002
     This document discloses a process for producing a sulfone derivative
     represented by the general formula R-W-S(O)2-X-Y-L2 (R represents an
     optionally substituted cyclic hydrocarbon group, etc.; W represents a bond or
```

an optionally substituted divalent chain hydrocarbon group; X represents an

ED

AR

S(O), S(O)2, CH2, etc.; and L2 represents hydrogen, hydroxy, or optionally substituted alkoxy) or a salt thereof, characterized by **reacting** a sulfinic acid derivative represented by the general formula R-W-S(O)2-M (R and W are the same as defined above; and M represents hydrogen, an alkali metal, or an alkaline earth metal) or a salt thereof with a compound represented by the general formula L1-X-Y-L2 (wherein X, Y, and L2 are the same as defined above; L1 represents a leaving group; and R5 represents hydrogen, etc.) or a salt thereof. The title process is used in the **preparation** of antithrombotic agents. For example, 3-[(6-chloro-2-naphthyl)sulfonyl]propionic acid Me ester was **prepared** in 88% yield by the title process.

IC ICM C07D401-04

ICS C07C315-00; C07C317-44

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1

ST naphthylsulfonylpropionic acid **prepn**; methyl acrylate **reaction** naphthylsulfinic acid deriv; sulfone deriv **prepn**antithrombotic

IT Addition reaction

(addition <u>reaction</u> of naphthylsulfinic acid derivative with Me acrylate or with acrylamide derivative)

IT Amines, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of amines with piperidone derivs. in presence of reducing agents)

TT 74-89-5, Methylamine, <u>reactions</u> 96-33-3, Methyl acrylate 814-68-6, Acryloyl chloride 3678-63-5, 4-Chloro-2-methylpyridine 41979-39-9, 4-Piperidinone hydrochloride 102153-63-9 RL: RCT (Reactant); RACT (Reactant or reagent)

(process for producing sulfone derivative)

IT 64-18-6, Formic acid, <u>reactions</u> 56553-60-7, Sodium triacetoxyborohydride

RL: RGT (Reagent); RACT (Reactant or reagent)
 (process for producing sulfone derivative)

REFERENCE COUNT:

66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L119 ANSWER 9 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:610316 HCAPLUS Full-text

DOCUMENT NUMBER:

137:163829

TITLE:

Use of a composition comprising a retinoid and an Erb

inhibitor in the preparation of a

medicament for the treatment of retinoid

skin damage

INVENTOR(S):

Elder, James Tilford; Varani, James

PATENT ASSIGNEE(S): Warner-Lambert Company, USA

SOURCE:

LANGUAGE:

Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 1230919	A2 20020814	EP 2002-2611	20020205 <
EP 1230919	A3 20021218		
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR	
NZ 516873	A 20031128	NZ 2002-516873	20020128 <
CA 2370236	A1 20020812	CA 2002-2370236	20020131 <

```
10/574,993
    AU 2002015470
                          Α5
                                20020815
                                            AU 2002-15470
                                                                   20020207 <--
                                                                   20020208 <--
                                20020925
                                            CN 2002-104570
    CN 1370535
                          Α
                                20021114
    US 2002169176
                         A1
                                           US 2002-73569
                                                                   20020211 <--
    HU 200200492
                         A2
                                20021228 HU 2002-492
                                                                   20020211 <--
                                           ZA 2002-1157
     ZA 2002001157
                         Α
                                20030811
                                                                   20020211 <--
     JP 2002275095
                         Α
                                20020925
                                            JP 2002-33608
                                                                   20020212 <--
                                20050902
                                            HK 2003-100597
                                                                   20030123 <--
    HK 1048271
                         A1
                                            US 2004-824182
    US 2004198752
                                                                   20040414 <--
                         A1
                                20041007
                                                                P 20010212 <---
PRIORITY APPLN. INFO.:
                                            US 2001-268220P
                                            US 2002-73569
                                                                A1 20020211 <--
OTHER SOURCE(S):
                         MARPAT 137:163829
     Entered STN: 15 Aug 2002
     Erb inhibitors used in combination with retinoids are effective to prevent
AB
     skin injury otherwise caused by retinoids alone. A method of treating skin
     aging and similar skin disorders comprises administering retinoids in
     combination with erb inhibitors I (E1-E3 include halo; R is alkylcarbonyl or
     alkenylcarbonyl; R' is lower alkoxy optionally substituted with amino groups).
     ICM A61K031-07
IC
     ICS A61K031-517; A61K031-519; A61P017-00
CC
     1-12 (Pharmacology)
     Erb inhibitor retinoid combination therapeutic skin
ST
     disorder; aging skin Erb inhibitor retinoid combination;
     quinazoline deriv retinoid combination therapeutic skin
     disorder
ΙT
     Proteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (Erb; retinoid and Erb inhibitor for treatment of retinoid skin
        damage)
IT
     Skin, disease
        (aging; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
ΙT
     Skin, neoplasm
        (and precancerous lesions; retinoid and Erb inhibitor for
        treatment of retinoid skin damage)
IT
     Hyperplasia
        (cutaneous; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
IT
     Pituitary gland
        (extract; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
     Skin, disease
IT
        (hyperplasia; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
IT
     Skin
        (keratinocyte; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
     Skin, disease
ΙT
        (photoaging; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
     Drug delivery systems
IT
        (prodrugs; retinoid and Erb inhibitor for treatment of retinoid
        skin damage)
IT
     Acne
       Antitumor agents
```

Drug delivery systems

Drug interactions

**Drug** toxicity

Fibroblast

Human

Psoriasis

#### Skin, disease

(retinoid and Erb inhibitor for treatment of retinoid skin damage)

IT Retinoids

> RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (retinoid and Erb inhibitor for treatment of retinoid skin

68-26-8, all-trans-Retinol 116-31-4, all-trans-Retinal IT all-trans-Retinoic acid 472-86-6, 13-cis-Retinal 514-85-2, 9-cis-Retinal 2052-63-3, 13-cis-Retinol 4759-48-2, 13-cis-Retinoic 5300-03-8, 9-cis-Retinoic acid 22737-97-9, 9-cis-Retinol RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (retinoid and Erb inhibitor for treatment of retinoid skin damage)

IT 7440-70-2, Calcium, biological studies 9004-10-8, Insulin, biological 62229-50-9, **Epidermal** growth factor 79079-06-4, EGF receptor tyrosine kinase 154531-34-7

RL: BSU (Biological study, unclassified); BIOL (Biological study) (retinoid and Erb inhibitor for treatment of retinoid skin damage)

IT 253-82-7D, Quinazoline, derivs. 171179-06-9, PD 158780 198959-99-8 198960-77-9 267243-28-7 289499-45-2

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(retinoid and Erb inhibitor for treatment of retinoid skin damage)

L119 ANSWER 10 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

2002:574927 HCAPLUS Full-text

DOCUMENT NUMBER:

137:119655

TITLE:

Combinations of drugs (e.g., a benzimidazole

and pentamidine) for the treatment of

neoplastic disorders

Borisy, Alexis; Keith, Curtis; Foley, Michael A.; INVENTOR(S):

Stockwell, Brent R.

PATENT ASSIGNEE(S):

Combinatorx, Incorporated, USA

SOURCE:

PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

US 6693125

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_\_ \_\_\_\_\_\_ 20020801 WO 2002-US1707 WO 2002058697 **A**1 20020122 <--W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2002165261 **A**1 20021107 US 2001-768870 20010124 <--

> B2 **A**1 20020806

AU 2002243618 AU 2002-243618 20020122 <--

20040217

```
20031126
                                             EP 2002-709117
                                                                    20020122 <--
     EP 1363625
                          A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                20040401
                                            US 2003-677664
                                                                    20031002 <--
     US 2004063769
                          A1
PRIORITY APPLN. INFO.:
                                             US 2001-768870
                                                                 A1 20010124 <--
                                             WO 2002-US1707
                                                                 W 20020122 <--
OTHER SOURCE(S):
                         MARPAT 137:119655
     Entered STN: 02 Aug 2002
AB
     The invention features a method for treating a patient having a cancer or
     other neoplasm, by administering to the patient (1) a benzimidazole or a
     metabolite or analog thereof; and (ii) pentamidine or a metabolite or analog
     thereof simultaneously or within 14 days of each other in amts. sufficient to
     inhibit the growth of the neoplasm.
IC
     ICM A61K031-415
     1-6 (Pharmacology)
CC
     Section cross-reference(s): 63
ST
     antitumor agent benzimidazole pentamidine analog combination
     Uterus, neoplasm
IT
        (cervix; drug combinations for treatment of
        neoplastic disorders)
IT
     Intestine, neoplasm
        (colon; drug combinations for treatment of neoplastic
        disorders)
IT
     Intestine, neoplasm
        (colorectal; drug combinations for treatment of
        neoplastic disorders)
ΙT
     Antitumor agents
       Brain, neoplasm
       Kidney, neoplasm
       Leukemia
     Liver, neoplasm
       Lung, neoplasm
     Lymphoma
       Mammary gland, neoplasm
       Ovary, neoplasm
     Pancreas, neoplasm
       Prostate gland, neoplasm
       Sarcoma
       Skin, neoplasm
     Stomach, neoplasm
       Testis, neoplasm
     Uterus, neoplasm
        (drug combinations for treatment of neoplastic
        disorders)
IT
     Drug delivery systems
        (inhalants; drug combinations for treatment of
        neoplastic disorders)
     Drug delivery systems
ΙT
        (injections, i.m.; drug combinations for treatment of
        neoplastic disorders)
IT
     Drug delivery systems
         (injections, i.v.; drug combinations for treatment of
        neoplastic disorders)
IT
     Drug delivery systems
        (oral; drug combinations for treatment of neoplastic
        disorders)
IT
     Drug delivery systems
        (rectal; drug combinations for treatment of
```

60-56-0, Mercazole 100-33-4, Pentamidine 101-62-2, Phenamidine

neoplastic disorders)

IT

104-32-5, Propamidine 122-06-5, Stilbamidine 140-64-7, Pentamidine 495-99-8, Hydroxystilbamidine 496-00-4, Dibrompropamidine isethionate 536-71-0, Diminazene 548-73-2, Droperidol 618-39-3, Benzamidine 1402-38-6, Actinomycin 1438-30-8, Netropsin 1929-88-0, Benzthiazuron 6306-71-4, Lobendazole 2062-78-4, Pimozide 3459-96-9, Amicarbalide 11056-06-7, Bleomycin 14255-87-9, Parbendazole 17804-35-2, Benomyl 18691-97-9, Methabenzthiazuron 20559-55-1, Oxibendazole 20830-81-3, 22769-68-2 24370-25-0, 2-Benzimidazolylurea Daunorubicin 26097-80-3, 26130-02-9, Frentizole 31430-15-6, Flubendazole Cambendazole 31430-18-9, Nocodazole 31431-39-7, Mebendazole 31431-43-3, 33016-12-5, TN-16 39389-47-4, Distamycin Cyclobendazole 43210-67-9, 53716-50-0, Oxfendazole Fenbendazole 54029-12-8, Albendazole sulfoxide 57808-66-9, Domperidone 54965-21-8, Albendazole 61570-90-9, Tioxidazole 68844-77-9, Astemizole 73590-58-6, Omeprazole 75184-71-3, Albendazole sulfone 80434-77-1, NSC 181928 90509-02-7, Luxabendazole 94345-47-8, Heptamidine 116644-53-2, Mibefradil 124076-61-5, Butamidine 124076-65-9 161374-52-3, Nonamidine RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(<a href="mailto:drug">drug</a> combinations for treatment of <a href="mailto:neoplastic">neoplastic</a> disorders)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L119 ANSWER 11 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2002:293607 HCAPLUS Full-text

DOCUMENT NUMBER:

136:325232

TITLE:

Preparation of sulfoxide and bis-sulfoxide

compounds and compositions for cholesterol management

and related uses

INVENTOR(S):

Dasseux, Jean-Louis H.; Oniciu, Carmen Daniela

Esperion Therapeutics, Inc., USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 262 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

E: Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					KIND DATE			APPL:	ICAT:	ION 1	NO.	DATE					
WO	2002	0308	82		A2	_	2002	0418	1	WO 2	001-1	US31	 871		2	0011	011 <
WO	2002	0308	82		<b>A</b> 9		2003	0220									
WO	2002	0308	82		A3		2003	0925									
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
										EC,							
										KE,					•	•	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
										SL,							
		UZ,	VN,	YU,	ZA,	ZW											
	RW:	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AM,	ΑZ,	BY,	KG,
		KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
		IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								
CA	2425	678			A1		2002	0418		CA 2	001-	2425	678		2	0011	011 <
AU	2002	0116	1667 A5				2002	0422		AU 2	002-	1166	7		20011011 <-		
EP	1366	024			A2		2003	1203		EP 2	001-	9797	35		2	0011	011 <
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR						
				Т				JP 2002-534270					20011011 <				

BR 2001014623 Α 20051213 BR 2001-14623 20011011 <--PRIORITY APPLN. INFO .: US 2000-239105P P 20001011 <--WO 2001-US31871 W 20011011 <--OTHER SOURCE(S): MARPAT 136:325232 Entered STN: 19 Apr 2002 ED Title compds. W1ZmSOGSOZmW2 (I) [wherein Z = independently CH2, CH:CH, or AB C6H4; m = independently 1-9; when Z = C6H4, m = 1; G = (CH2)x, CH2CH:CHCH2, CH:CH, CH2C6H4CH2, or C6H4; x = 2-4; W1 and W2 = independently CR1R2(CH2)nY, tetrahydro(oxo)pyranyl(oxy), oxooxetanyl, tetrahydrooxofuranyl, etc.; CR1R2(CH2)cCR3R4(CH2)nY, or CR1R2(CH2)cV; n = 0-4; c = 1-2; R1 and R2 = 1-1independently alkyl, alkenyl, alkynyl, Ph, or benzyl; or when one or both of W1 and W2 = CR1R2(CH2)cCR3R4Y, then R1 and R2 can both be H; R3 = H, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, NO2, or CF3; R4 = OH, alkyl, alkenyl, alkynyl, alkoxy, Ph, benzyl, Cl, Br, CN, NO2, or CF3; Y = OH, CO2H, CHO, CO2R5, SO3H, mono-, di-, or triphosphate, dioxo- or dithioxohexahydrothieno[3,2-c]pyridinyl, sulfamoyl, tetrazolyl, hydroxyoxazolyl, hydroxypyranonyl, substituted imidazolidinedionyl, etc.; R5 = (un) substituted alkyl, alkenyl, alkynyl, Ph, or benzyl] were prepared as peroxisome proliferator activated receptor (PPAR) antagonists for treatment and prevention of cardiovascular diseases, dyslipidemias, dysproteinemias, and glucose metabolism disorders. I are also useful for treating and preventing Alzheimer's Disease, Syndrome X, PPAR-related disorders, septicemia, thrombotic disorders , obesity, pancreatitis, hypertension, renal disease, cancer inflammation, and impotence. For example, 6-(5,5-dimethyl-6hydroxyhexylsulfanyl)-2,2-dimethylhexan-1-ol was oxidized to 6-(5,5-dimethyl-6-hydroxyhexane-1-sulfinyl)-2,2-dimethylhexan- 1-ol (quant.) using H2O2 in glacial AcOH. The latter increased reduced serum triglycerides in female obese Zucker rats by 48% and 42% after 1 and 2 wk of treatment. Although non-HDL cholesterol increased by 38% and 62%, a marked increase in HDL cholesterol of 2.2-fold and 3.1-fold after one and two weeks of treatment, resp., resulted in an unexpectedly beneficial increased ratio of HDL/non-HDL cholesterol from 2.70 (pretreatment) to 3.84 and 4.97. In certain embodiments, I may be administered in combination therapy with other therapeutics, such as hypocholesterolemic and hypoglycemic agents. IC ICM C07C317-18 ICS A61K031-10; A61P009-00; C07C317-10; C07C317-22; C07C317-44; C07D233-40; C07D233-42; C07D249-04; C07D257-04; C07D261-12; C07D305-12; C07D307-32; C07D309-12; C07D309-30; C07D309-40; C07D333-48; C07D335-02; C07D495-04; C07F009-09 CC 23-11 (Aliphatic Compounds) Section cross-reference(s): 1 alkyl sulfoxide prepn anticholesterol hypolipidemic antidiabetic ST antiobesity; sulfoxide alkyl prepn peroxisome proliferator activated receptor antagonist IT Fats and Glyceridic oils, biological studies RL: BSU (Biological study, unclassified); BIOL (Biological study) (animal, reduction in livestock; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) ΙT Heart, disease (cardiac syndrome X, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) Egg, poultry IT (cholesterol reduction; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) IT (impotence, treatment; preparation of sulfoxide and bis-sulfoxide compds. as for cholesterol management and related uses) IT Metabolic disorders (metabolic syndrome X, treatment; preparation of

```
sulfoxide and bis-sulfoxide compds. as for cholesterol management and
        related uses)
IT
     Inflammation
     Pancreas, disease
        (pancreatitis, treatment; preparation of sulfoxide and
        bis-sulfoxide compds. as for cholesterol management and related uses)
IT
     Anti-Alzheimer's agents
     Anti-inflammatory agents
     Anticholesteremic agents
     Anticoagulants
     Antihypertensives
     Antiobesity agents
       Antitumor agents
       Cardiovascular agents
     Hypolipemic agents
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
ΙT
     Fatty acids, biological studies
     Glycerides, biological studies
     High-density lipoproteins
     Low-density lipoproteins
     Peroxisome proliferator-activated receptors
     Very-low-density lipoproteins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
IT
     Kidney, disease
     Septicemia
        (treatment; preparation of sulfoxide and bis-sulfoxide compds. as
        for cholesterol management and related uses)
IT
     Dyslipidemia
     Dyslipidemia
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (treatment; preparation of sulfoxide and bis-sulfoxide compds. as
        for cholesterol management and related uses)
IT
     50-99-7, Glucose, biological studies
                                           57-88-5, Cholesterol, biological
     studies
               300-85-6
                           9004-10-8, Insulin, biological studies
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
IT
     411213-93-9P
                     412951-56-5P
                                    412951-57-6P
                                                   412951-58-7P
                                                                   412951-59-8P
     412951-60-1P
                     412951-61-2P
                                    412951-62-3P
                                                   412951-63-4P
                                                                   412951-64-5P
                     412951-66-7P
                                    412951-67-8P
                                                   412951-68-9P
     412951-65-6P
                                                                   412951-69-0P
     412951-70-3P
                     412951-71-4P
                                    412951-72-5P
                                                   412951-73-6P
                                                                   412951-74-7P
                                                   412951-78-1P
     412951-75-8P
                     412951-76-9P
                                    412951-77-0P
                                                                   412951-79-2P
     412951-80-5P
                     412951-81-6P
                                    412951-82-7P
                                                   412951-83-8P
                                                                   412951-84-9P
     412951-85-0P
                     412951-86-1P
                                    412951-87-2P
                                                   412951-88-3P
                                                                   412951-89-4P
                                    412951-92-9P
     412951-90-7P
                     412951-91-8P
                                                   412951-93-0P
                                                                   412951-94-1P
     412951-95-2P
                     412951-96-3P
                                    412951-97-4P
                                                   412951-98-5P
                                                                   412951-99-6P
     412952-00-2P
                     412952-01-3P
                                    412952-02-4P
                                                   412952-03-5P
                                                                   412952-04-6P
     412952-05-7P
                     412952-06-8P
                                    412952-07-9P
                                                   412952-08-0P
                                                                   412952-09-1P
     412952-10-4P
                     412952-11-5P
                                    412952-12-6P
                                                   412952-13-7P
                                                                   412952-14-8P
     412952-15-9P
                     412952-16-0P
                                    412952-17-1P
                                                   412952-18-2P
                                                                   412952-19-3P
     412952-20-6P
                     412952-21-7P
                                    412952-22-8P
                                                   412952-23-9P
                                                                   412952-24-0P
     412952-25-1P
                     412952-26-2P
                                    412952-27-3P
                                                   412952-28-4P
                                                                   412952-29-5P
     412952-30-8P
                     412952-31-9P
                                    412952-32-0P
                                                   412952-33-1P
                                                                   412952-34-2P
     412952-35-3P
                     412952-36-4P
                                    412952-37-5P
                                                   412952-38-6P
                                                                   412952-39-7P
                                                   412952-43-3P
     412952-40-0P
                     412952-41-1P
                                    412952-42-2P
                                                                   412952-44-4P
     412952-45-5P
                     412952-47-7P
                                    412952-49-9P
                                                   412952-51-3P
                                                                   412952-52-4P
```

```
412952-55-7P
412952-53-5P
               412952-54-6P
                                               412952-56-8P
                                                               412952-57-9P
412952-58-0P
                412952-59-1P
                               412952-60-4P
                                               412952-61-5P
                                                               412952-62-6P
412952-63-7P
               412952-64-8P
                               412952-65-9P
                                               412952-66-0P
                                                               412952-67-1P
412952-68-2P
                412952-69-3P
                               412952-70-6P
                                               412952-71-7P
                                                               412952-72-8P
412952-73-9P
               412952-74-0P
                               412952-75-1P
                                               412952-76-2P
                                                               412952-77-3P
                                               412952-81-9P
412952-78-4P
               412952-79-5P
                               412952-80-8P
                                                               412952-82-0P
412952-83-1P
                412952-84-2P
                               412952-85-3P
                                               412952-86-4P
                                                               412952-87-5P
412952-88-6P
                412952-89-7P
                               412952-90-0P
                                               412952-91-1P
                                                               412952-92-2P
                                                               412952-97-7P
412952-93-3P
                412952-94-4P
                               412952-95-5P
                                               412952-96-6P
412952-98-8P
                412952-99-9P
                               412953-00-5P
                                               412953-01-6P
                                                               412953-02-7P
412953-03-8P
                412953-04-9P
                               412953-05-0P
                                               412953-06-1P
                                                               412953-07-2P
412953-08-3P
                412953-09-4P
                               412953-10-7P
                                               412953-11-8P
                                                               412953-12-9P
412953-13-0P
                412953-14-1P
                               412953-15-2P
                                               412953-16-3P
                                                               412953-17-4P
412953-18-5P
                412953-19-6P
                               412953-20-9P
                                               412953-21-0P
                                                               412953-22-1P
412953-23-2P
                412953-24-3P
                               412953-26-5P
                                               412953-28-7P
                                                               412953-29-8P
412953-30-1P
                412953-31-2P
                               412953-32-3P
                                               412953-33-4P
                                                               412953-34-5P
412953-35-6P
                412953-36-7P
                               412953-37-8P
                                               412953-38-9P
                                                               412953-39-0P
412953-40-3P
                412953-41-4P
                               412953-42-5P
                                               412953-43-6P
                                                               412953-44-7P
412953-45-8P
                412953-46-9P
                               412953-47-0P
                                               412953-48-1P
                                                               412953-49-2P
412953-50-5P
                412953-51-6P
                               412953-52-7P
                                               412953-53-8P
                                                               412953-54-9P
412953-55-0P
                412953-56-1P
                               412953-57-2P
                                               412953-58-3P
                                                               412953-59-4P
412953-60-7P
                412953-61-8P.
                               412953-62-9P
                                               412953-63-0P
                                                               412953-64-1P
412953-65-2P
                412953-66-3P
                               412953-67-4P
                                               412953-68-5P
                                                               412953-69-6P
412953-70-9P
                412953-71-0P
                               412953-72-1P
                                               412953-73-2P
                                                               412953-74-3P
412953-75-4P
                412953-76-5P
                               412953-77-6P
                                               412953-78-7P
                                                               412953-79-8P
412953-80-1P
                412953-81-2P
                               412953-82-3P
                                               412953-83-4P
                                                               412953-85-6P
412953-86-7P
                412953-87-8P
                               412953-88-9P
                                               412953-89-0P
                                                               412953-90-3P
412953-91-4P
                412953-92-5P
                               412953-93-6P
                                               412953-94-7P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(\underline{\textbf{preparation}}\ \text{of sulfoxide and bis-sulfoxide compds.}\ \text{as for}$ 

IT

```
cholesterol management and related uses)
412953-95-8P
               412953-96-9P
                               412953-97-0P
                                               412953-98-1P
                                                               412953-99-2P
412954-00-8P
               412954-01-9P
                               412954-02-0P
                                               412954-03-1P
                                                               412954-04-2P
412954-05-3P
               412954-06-4P
                               412954-07-5P
                                               412954-08-6P
                                                               412954-09-7P
412954-10-0P
               412954-11-1P
                               412954-12-2P
                                               412954-13-3P
                                                               412954-14-4P
412954-15-5P
               412954-16-6P
                               412954-17-7P
                                               412954-18-8P
                                                               412954-19-9P
412954-20-2P
               412954-21-3P
                               412954-22-4P
                                               412954-23-5P
                                                               412954-24-6P
412954-25-7P
               412954-26-8P
                               412954-27-9P
                                               412954-28-0P
                                                               412954-29-1P
                                                               412954-34-8P
412954-30-4P
               412954-31-5P
                               412954-32-6P
                                               412954-33-7P
412954-35-9P
               412954-36-0P
                               412954-37-1P
                                               412954-38-2P
                                                               412954-39-3P
               412954-41-7P
412954-40-6P
                               412954-42-8P
                                               412954-43-9P
                                                               412954-44-0P
412954-45-1P
                412954-46-2P
                               412954-47-3P
                                               412954-48-4P
                                                               412954-49-5P
412954-50-8P
               412954-51-9P
                               412954-52-0P
                                               412954-53-1P
                                                               412954-54-2P
412954-55-3P
               412954-56-4P
                               412954-57-5P
                                               412954-58-6P
                                                               412954-59-7P
                412954-61-1P
412954-60-0P
                               412954-62-2P
                                               412954-63-3P
                                                               412954-64-4P
412954-65-5P
                412954-66-6P
                               412954-67-7P
                                               412954-68-8P
                                                               412954-69-9P
                                               412954-73-5P
412954-70-2P
                412954-71-3P
                               412954-72-4P
                                                               412954-74-6P
412954-75-7P
                412954-76-8P
                               412954-77-9P
                                               412954-78-0P
                                                               412954-79-1P
412954-80-4P
                412954-81-5P
                               412954-82-6P
                                               412954-83-7P
                                                               412954-84-8P
412954-85-9P
                412954-86-0P
                               412954-87-1P
                                               412954-88-2P
                                                               412954-89-3P
412954-90-6P
                412954-91-7P
                               412954-92-8P
                                               412954-93-9P
                                                               412954-94-0P
                               412954-97-3P
412954-95-1P
                412954-96-2P
                                               412954-98-4P
                                                               412954-99-5P
412955-00-1P
                412955-01-2P
                               412955-02-3P
                                               412955-03-4P
                                                               412955-04-5P
                               412955-07-8P
                412955-06-7P
412955-05-6P
                                               412955-08-9P
                                                               412955-09-0P
                412955-12-5P
412955-10-3P
                               412955-14-7P
                                               412955-16-9P
                                                               412955-17-0P
412955-18-1P
                412955-19-2P
                               412955-20-5P
                                               412955-21-6P
                                                               412955-22-7P
412955-23-8P
                412955-24-9P
                               412955-25-0P
                                               412955-26-1P
                                                               412955-27-2P
412955-28-3P
                412955-29-4P
                               412955-30-7P
                                               412955-31-8P
                                                               412955-32-9P
```

```
10/574,993
                                  412955-35-2P
                                                 412955-36-3P
                                                                412955-37-4P
    412955-33-0P
                   412955-34-1P
                                                                412955-42-1P
                                  412955-40-9P
                                                 412955-41-0P
    412955-38-5P
                   412955-39-6P
                                                                412955-47-6P
     412955-43-2P
                   412955-44-3P
                                  412955-45-4P
                                                 412955-46-5P
     412955-48-7P
                   412955-49-8P
                                  412955-50-1P
                                                 412955-51-2P
                                                                412955-52-3P
                   412955-54-5P
                                  412955-55-6P
                                                412955-56-7P
                                                                412955-57-8P
    412955-53-4P
     412955-58-9P
                   412955-59-0P
                                  412955-60-3P
                                                 412955-61-4P
                                                                412955-62-5P
                   412955-64-7P
                                  412955-65-8P
                                                 412955-66-9P
                                                                412955-67-0P
     412955-63-6P
                                  412955-70-5P
                                                 412955-71-6P
                                                                412955-72-7P
     412955-68-1P
                   412955-69-2P
     412955-73-8P
                   412955-74-9P
                                  412955-75-0P
                                                 412955-76-1P
                                                                412955-77-2P
                                  412955-80-7P
     412955-78-3P
                   412955-79-4P
                                                 412955-81-8P
                                                                412955-82-9P
                                                 412955-86-3P
     412955-83-0P
                   412955-84-1P
                                  412955-85-2P
    RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
     412934-88-4
                  412934-91-9
                                412935-66-1
                                              412935-69-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of sulfoxide and bis-sulfoxide compds. as for
        cholesterol management and related uses)
L119 ANSWER 12 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2002:72048 HCAPLUS Full-text
DOCUMENT NUMBER:
                        136:118386
                        Preparation of 1-aryl-4-haloalkyl-2(1H)-
TITLE:
                        pyridones as herbicides
                        Sagasser, Ingo; Menke, Olaf; Hamprecht, Gerhard; Puhl,
INVENTOR(S):
                        Michael; Reinhard, Robert; Witschel, Matthias; Zagar,
                        Cyrill; Walter, Helmut
                        Basf Aktiengesellschaft, Germany
PATENT ASSIGNEE(S):
                        PCT Int. Appl., 119 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
                        German
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                                          APPLICATION NO.
                                                                DATE
                        KIND
                               DATE
                        ----
                               _____
                                           -----
                                                                  -----
     -----
     WO 2002006233
                         A1
                               20020124
                                          WO 2001-EP8251
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
```

```
20010717 <--
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                         CA 2001-2416192
EP 2001-956538
                                                             20010717 <--
                               20030115
    CA 2416192
                          A1
                                20030416
                                                                   20010717 <--
    EP 1301483
                         A1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                         Т
                                20040212
                                            JP 2002-512137
                                                                   20010717 <--
    JP 2004504300
    US 2003216257
                         A1
                                20031120
                                            US 2003-332860
                                                                   20030114 <--
PRIORITY APPLN. INFO.:
                                            DE 2000-10034838
                                                                A 20000718 <--
                                                               W 20010717 <--
                                            WO 2001-EP8251
```

MARPAT 136:118386 OTHER SOURCE(S):

Entered STN: 25 Jan 2002

IT

```
AΒ
     Title compds. [I; R1 = H, halo; R2, R7 = H, amino, alkyl; R3 = haloalkyl; R4 =
     H, halo; R5 = H, cyano, halo, alkyl, haloalkyl, alkoxy, haloalkoxy; A = O, S;
     X = bond, (substituted) CH2, OCH2, SCH2, CH2CH2, CH:CH, C.tplbond.C,
     CH:CHCH:CH; R6 = H, NO2, cyano, halo, halosulfonyl, OYR8, OCOYR8, N(YR8)(ZR9),
     N(YR8)SO2ZR9, etc.; Y, Z = bond, (substituted) CH2, CH2CH2; R8, R9 = H,
     haloalkyl, alkoxyalkyl, alkenyl, etc.; Q = N, CR10; R10 = H, OH, SH, NH2;
     XR6R10 = (substituted) (O-, S-, N-interrupted) (CH2)3, (CH2)4], were prepared
     Thus, i-Pr 2-chloro-5-[2,6-dioxo-4- trifluoromethyl-3,6-dihydro-1(2H)-
     pyridinyl]-4-fluorobenzoate (preparation given) was refluxed with POCl3 to
     give 46% i-Pr 2-chloro-5-[2-chloro-6-oxo-4-trifluoromethyl-1(6H)-pyridinyl]-4-
     fluorobenzoate. I at 1000 ppm were said to show very good pre- and
     postemergent herbicidal activity for Callosobruchus chinensis, etc.
IC
     ICM C07D213-64
     ICS C07D213-69; C07D413-04; C07D417-04; A01N043-76; A01N043-78;
          A01N043-40
CC
     27-16 (Heterocyclic Compounds (One Hetero Atom))
     Section cross-reference(s): 5
ST
     arylhaloalkylpyridone prepn herbicide; defoliant
     arylhaloalkylpyridone prepn; pyridone aryl haloalkyl
     prepn herbicide
IT
     Defoliants
     Herbicides
        (preparation of (aryl)(haloalkyl)pyridones as herbicides)
IT
     390412-38-1P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); RCT
     (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of (aryl) (haloalkyl) pyridones as herbicides)
IT
     390412-37-0P
                    390412-39-2P
                                   390412-40-5P
                                                   390412-41-6P
                                                                  390412-42-7P
     390412-43-8P
                    390412-44-9P
                                   390412-45-0P
                                                   390412-46-1P
                                                                  390412-47-2P
     390412-48-3P
                    390412-49-4P
                                   390412-50-7P
                                                   390412-51-8P
                                                                  390412-52-9P
     390412-53-0P
                    390412-54-1P
                                   390412-55-2P
                                                  390412-56-3P
                                                                  390412-57-4P
     390412-58-5P
                    390412-59-6P
                                   390412-60-9P
                                                  390412-61-0P
                                                                  390412-62-1P
     390412-63-2P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of (aryl)(haloalkyl)pyridones as herbicides)
IT
     107-19-7, 2-Propyn-1-ol
                               383-63-1, Ethyl trifluoroacetate
                                                                   50650-59-4,
     4-(Trifluoromethyl)-2-pyridone
                                      86819-51-4
                                                    98349-22-5,
     2,4,5-Trifluorobenzonitrile
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of (aryl) (haloalkyl) pyridones as herbicides)
IT
     390412-30-3P
                    390412-31-4P
                                   390412-32-5P 390412-33-6P
                                                                  390412-34-7P
     390412-35-8P
                    390412-36-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of (aryl) (haloalkyl) pyridones as herbicides)
                               THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         11
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
                     HCAPLUS COPYRIGHT 2007 ACS on STN
L119 ANSWER 13 OF 34
                         2001:851140 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
                         Preparation of 3-arylisothiazoles as
                         herbicides, desiccants, and defoliants.
INVENTOR(S):
                         Sagasser, Ingo; Menke, Olaf; Rack, Michael; Hamprecht,
                         Gerhard; Puhl, Michael; Reinhard, Robert; Witschel,
                         Matthias; Zagar, Cyrill; Walter, Helmut; Westphalen,
```

Karl-Otto

Basf Aktiengesellschaft, Germany PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 141 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO.
                                                                   DATE
    PATENT NO.
                         KIND
                                DATE
                         ____
                                            _____
                                           WO 2001-EP5457
                                                                   20010514 <--
    WO 2001087863
                         A1
                                20011122
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
             RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
             UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     CA 2408686
                          A1
                                20021112
                                          CA 2001-2408686
                                                                   20010514 <--
     EP 1289970
                          A1
                                20030312
                                          EP 2001-940469
                                                                   20010514 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2003533517
                          T
                                20031111
                                            JP 2001-584259
                                                                   20010514 <--
     US 2004023807
                          A1
                                20040205
                                            US 2002-276226
                                                                   20021114 <--
PRIORITY APPLN. INFO.:
                                            DE 2000-10023770
                                                              A 20000515 <--
                                            WO 2001-EP5457
                                                                W 20010514 <--
                         MARPAT 136:5978
OTHER SOURCE(S):
ED
     Entered STN: 23 Nov 2001
     Title compds. [I; X = bond, (substituted) CH2, CH2CH2, CH:CH, C.tplbond.C,
AB
     OCH2, etc.; R1 = haloalkyl, alkoxy, haloalkoxy, alkylthio, haloalkylthio,
     alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, etc.; R2 = H, halo, amino,
     cyano, NO2, alkyl, haloalkyl; R3 = H, halo; R4 = H, cyano, NO2, halo, alkyl,
     haloalkyl, alkoxy, haloalkoxy; R5 = H, NO2, cyano, halo, halosulfonyl, etc.; Q
     = N, CR6; R6 = H; R4R5X, R6R5X = (substituted) 3-4 membered chains containing
     C and 1-3 heteroatoms], were \underline{\mathbf{prepared}} Thus, 3-(4-chloro-2-fluoro-5-
     hydroxyphenyl)-4-chloro-5- trifluoromethylthiazole (preparation given) reacted
     with Me (S)-2-chloropropionate to give Me (R)-2-[2-chloro-4-fluoro-5-(4-
     chloro-5- trifluoromethylisothiazol-3-yl)phenoxy]propionate. The latter at
     15.6 g/ha showed very good herbicidal activity against weeds, including
     velvetleaf.
     ICM C07D275-02
IC
     ICS C07D417-04; A01N043-80
     28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 5
ST
     arylisothiazole prepn herbicide desiccant defoliant; thiazole
     aryl prepn herbicide desiccant defoliant
IT
     Defoliants
     Desiccants, plant
     Herbicides
        (preparation of arylisothiazoles as herbicides)
     374780-00-4P
                    374780-01-5P
                                   374780-02-6P 374780-03-7P
                                                                 374780-04-8P
     374780-05-9P
                    374780-06-0P
                                   374780-07-1P
                                                  374780-08-2P
                                                                 374780-09-3P
                    374780-11-7P
                                   374780-12-8P 374780-13-9P
                                                                 374780-14-0P
     374780-10-6P
     RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN
     (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
```

(preparation of arylisothiazoles as herbicides)

96-32-2, Methyl bromoacetate 106-96-7, Propargyl bromide

2365-48-2, Methyl thioglycolate Propionic anhydride 5445-17-0, Methyl 2-bromopropionate Cyclopropanecarbonyl chloride 6306-60-1, 2,4-Dichlorobenzeneacetonitrile 73246-45-4, Methyl 82424-97-3 (S)-2-chloropropionate 146447-10-1 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of arylisothiazoles as herbicides) IT 374780-15-1P 374780-16-2P 374780-17-3P 374780-18-4P 374780-19-5P 374780-21-9P 374780-22-0P 374780-23-1P 374780-20-8P 374780-24-2P 374780-25-3P 374780-26-4P 374780-27-5P 374780-28-6P 374780-29-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of arylisothiazoles as herbicides)

7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L119 ANSWER 14 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN 2001:851133 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 135:371736

374780-31-1P

TITLE: Preparation of 3-(4,5-dihydroisoxazol-5-

yl)benzoylcyclohexenones as herbicides

INVENTOR(S): Baumann, Ernst; Von Deyn, Wolfgang; Kudis, Steffen;

Langemann, Klaus; Mayer, Guido; Misslitz, Ulf; Neidlein, Ulf; Walter, Helmut; Zagar, Cyrill;

Witschel, Matthias

Basf Aktiengesellschaft, Germany PATENT ASSIGNEE(S):

PCT Int. Appl., 125 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P.A	TENT	NO.			KIND DATE			APPLICATION NO.					DATE					
WC	2001	0878	56		A1	_	2001	1122	1						2	0010	511	<
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	
		UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM			
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
	DE, DK				FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG			
CA	2408			A1		2002	1112		CA 2	001-	2408	680		2	0010	511	<	
EF	1284	969			A1	A1 20030226				EP 2	001-	9363	53		2	0010	511	<
EF	1284	969			B1 20040818				•									
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	ĽU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
JE	JP 2003533516						2003	1111		JP 2	001-	5842	52		2	0010	511	<
ΓA	AT 273965						2004	0915	5 AT 2001-936353						2	0010	511	<
បន	US 2003199699						2003	1023		US 2	002-	2762	25		2	0021	114	<
บร	US 6645919						2003	1111										
PRIORIT	RIORITY APPLN. INFO.									DE 2	000-	1002	4107		A 2	0000	518	<
									WO 2001-EP5390				1	W 20010511 <				

OTHER SOURCE(S): MARPAT 135:371736

ED Entered STN: 23 Nov 2001

Title compds. [I; R1, R2 = H, NO2, halo, cyano, alkyl, haloalkyl, alkoxy, AΒ haloalkoxy, alkylthio, haloalkylthio, etc.; R3 = H, halo, alkyl; R4 = H,

alkyl; R5, R6 = H, halo, cyano, NO2, alkyl, alkoxyalkyl, dialkoxyalkyl, etc.; R5R6 = (substituted) (O-, N-interrupted) alkylene; R7 = halo, cyano, OH, alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthio, etc.; R12 = OH, SH, halo, etc.; R13, R17 = H, alkyl, alkylthio, alkoxycarbonyl, etc.; R14, R16, R18 = H, alkyl, etc.; R15 = H, OH, halo, alkyl, haloalkyl, etc.], were prepared Thus, a solution of 1-hydroxycyclohex-1-en-3-one and Et3N in MeCN at  $0-5^{\circ}$  was treated dropwise with 2-methyl-3-(3-methyl-4,5-dihydroisoxazol-5-yl)-4methylsulfonylbenzoyl chloride in MeCN followed by stirring for 3 h at room temperature and addition of Et3N and Me3SiCN to give after 12 h stirring 43% 2-[2-methyl-3-(3-methyl-4,5-dihydroisoxazol-5-yl)-4-methylsulfonylbenzoyl]-3hydroxycyclohex-2-en-1- one. Several I at 125 or at 62.5 ppm were said to show very good pre- and postemergent herbicidal activity on Chenopodium album, etc.

```
IC
     ICM C07D261-04
     ICS A01N043-80
```

- CC 28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 5
- isoxazolylbenzoylcyclohexenone prepn herbicide; cyclohexenone ST benzoyl dihydroisoxazolyl prepn herbicide
- IT Herbicides

(preparation of dihydroisoxazolylbenzoylcyclohexenones as herbicides)

```
IT
     374076-76-3P
                    374076-77-4P
                                   374076-78-5P
                                                  374076-79-6P
                                                                  374076-80-9P
     374076-81-0P
                    374076-82-1P
                                   374076-83-2P
                                                  374076-84-3P
                                                                  374076-85-4P
     374076-86-5P
                    374076-87-6P
                                   374076-88-7P
                                                  374076-89-8P
                                                                  374076-90-1P
                                   374076-93-4P
                                                  374076-94-5P
     374076-91-2P
                    374076-92-3P
                                                                  374076-95-6P
     374076-96-7P
                    374076-97-8P
                                   374076-98-9P
                                                  374076-99-0P
                                                                  374077-00-6P
                                   374077-03-9P
     374077-01-7P
                    374077-02-8P
                                                  374077-04-0P
```

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of dihydroisoxazolylbenzoylcyclohexenones as herbicides)

IT 79-24-3, Nitroethane 637-91-2 14337-43-0 30182-67-3, 3-Hydroxycyclohex-2-en-1-one 345907-77-9 345907-79-1 345907-84-8 RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of dihydroisoxazolylbenzoylcyclohexenones as herbicides)

IT 345907-76-8P 345907-78-0P 345907-80-4P 345907-81-5P 345907-82-6P 345907-86-0P 345907-87-1P 345907-85-9P 345907-88-2P 345907-89-3P 353237-66-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of dihydroisoxazolylbenzoylcyclohexenones as herbicides)

REFERENCE COUNT:

1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

HCAPLUS COPYRIGHT 2007 ACS on STN L119 ANSWER 15 OF 34 2001:228868 HCAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 134:252356

Preparation of 2-(arylamino)-4-quinazolinols TITLE:

as inhibitors of cleavage of protein substrates by

Jacobs, Robert Toms; Folmer, James; Simpson, Thomas INVENTOR(S):

Richard; Chaudhari, Bipinchandra; Frazee, William

Jackson; Davenport, Timothy Wayne

PATENT ASSIGNEE(S):

Astrazeneca AB, Swed.; Astrazeneca UK Limited

PCT Int. Appl., 71 pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
APPLICATION NO.
    PATENT NO.
                         KIND
                                DATE
                                                                   DATE
    WO 2001021598
                          A1
                                20010329
                                            WO 2000-GB3555
                                                                    20000918 <--
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
             ZA, ZW
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          EP 2000-958907
                                                                    20000918 <--
    EP 1218358
                          Α1
                                20020703
                                20060913
    EP 1218358
                          В1
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003509501
                         T
                                20030311
                                            JP 2001-524977
                                                                    20000918 <--
    AT 339406
                          Т
                                20061015
                                            AT 2000-958907
                                                                    20000918 <--
    US 6399603
                          В1
                                20020604
                                            US 2000-668322
                                                                    20000922 <--
PRIORITY APPLN. INFO.:
                                            US 1999-155623P
                                                                    19990923 <--
                                            WO 2000-GB3555
                                                                W 20000918 <--
```

OTHER SOURCE(S):

AB

MARPAT 134:252356

ED Entered STN: 30 Mar 2001

I (e.g. [2-[(3,4-dichlorophenyl)amino]-4-hydroxy-6-nitroquinazolin-8-yl]-N-[(4-fluorophenyl)methyl]carboxamide) or a pharmaceutically -acceptable salt thereof and methods of using such compds. for the treatment of various diseases and pharmaceutical compns. comprising such compds. are claimed. In I, R2 is H, acetyl or (C1-C5)alkyl. R4 is H, acetyl or (C1-C5)alkyl. R5, R6 and R7 are independently H, halogen, (C1-C2)alkyl, halo(C1-C2)alkyl, nitro and cyano. R8 is H, Ph, (C1-C6)alkyl, Ri, heterocycle, substituted heterocycle, -(CH2)mC(0)N-[(CH2)pRg]Rb, -(CH2)mN[(CH2)pRg]Rb, -CH:CHRC, halogen, -CH:CHRC, -(CH2) mC(O) (CH2) mRo, -C(O) Rp, -(CH2) mC(O) O[(CH2) pRg], -(CH2)mN[(CH2)pRg]C(0)Rb, -(CH2)mOC(0)[(CH2)pRg], -CHORdORe, -CH2XRf, -S(0)2N[(CH2)pRq]Rb, -N[(CH2)pRq]S(0)2Rb, -S(0)2N[(CH2)pRq]Rb, -C(0)H, allyl and 4-hydroxybut-1-en-4-yl. R3', R4' and R5' are independently H, halogen, (C1-C4)alkyl, (C1-C4)alkoxy and halo(C1-C4)alkyl; wherein at least one of R5, R6, R7, R8, R3' and R5' is not H; and R4' is not equal to R7. Rb is H, (C1-C4) alkyl or substituted (C1-C4) alkyl. Rc is H, Ph, Ri, heterocycle, substituted heterocycle, -CO2Rb, -C(0)NRbRb, -S(0)n-Rf, 2-hydroxyisopropyl and cyano. Rd and Re are independently (C1-C4)alkyl; or Rd and Re together are -CH2CH2- or -CH2CH2CH2-. Rf is (C1-C4)alkyl, vinyl, -CH2CO2Rb, Ph or benzyl. Rg is (C1-C10)alkyl, substituted (C1-C10)alkyl, Ph, Ri, heterocycle, substituted heterocycle, -ORb, -NRbRb, -NRjRo, -N(Rj)SO2Rj, -CO2Rb, -C(O)NRjRj, -SO2phenyl and 2-oxopyrrolid-1-yl; or Rg and Rb together form -CH2CH2N(Rj)CH2CH2-, -(CH2)4-, -CH(Rh)CH2CH2CH2-, or -CH2CH2OCH2CH2-. Rh is -CO2Rf or -CH2O-Ph. Ri is Ph, containing 1-3 substituents selected from halogen, (C1-C6)alkyl, -ORj, -O(substituted phenyl)-NRjRj, halo(C1-C6)alkyl, halo(C1-C4)alkoxy, nitro, -C(O)Rj, -C(O)(substituted phenyl), -(CH2)mC(O)NRjRk, -(CH2)mC(O)N(Rj)SO2[(C1-C6)alkyl], -(CH2)mC(0)NRj(substituted phenyl), -(CH2)nCO2Rj, -OC(0)Rj, -N(Rj)C(0)Rj, -NRjC(0)halo(C1-C4)alkoxy, -C(0)NRjRj, -NRjS(0)2(C1-C4)alkyl, -SOn(C1-C6)alkyl,-SOn(halogen), -SOm(CH2)nphenyl, -SO2NRjRj, -SO2NRjRk, -SO2NRj(substituted (C1-C6) alkyl), -SO2 (CH2) nRo, -SO2N (Rj) (CH2) nRo, -SOn (halo (C1-C3) alkyl), -SOn(pyrrolidin-1-yl substituted in the 2 position by Rn), -CN, -SCN, Ph, heterocycle and benzyl. Rj is H or (C1-C6)alkyl. Rk is -(CH2)nCH2OCH2Rb, -

```
C(O)NRjRj or -C(O)Rj. Rm is heterocycle, containing one or two substituents
selected from halogen, (C1-C6)alkyl, -ORj, -O(substituted phenyl)-NRjRj,
halo(C1-C6)alkyl, halo(C1-C4)alkoxy, nitro, -C(0)Rj, -C(0)(substituted
phenyl), -(CH2)mC(O)NRjRk, -(CH2)mC(O)N(Rj)SO2[(C1-C6)alkyl], -
(CH2)mC(0)NRj(substituted phenyl), -(CH2)nCO2Rj, -OC(0)Rj, -N(Ri)C(0)Rj, -
NRjC(0) -halo(C1-C4)alkoxy, -C(0)NRjRj, -NRjS(0)2(C1-C4)alkyl, -SOn(C1-
C6)alkyl, -SOn(halogen), -SOm(CH2)nphenyl, -SO2NRjRj, -SO2NRjRk, -
SO2NRj(substituted (C1-C6)alkyl), -SO2(CH2)nRo, -SO2N(Rj)(CH2)nRo, -
SOn(halo(C1-C3)alkyl), -SOn(pyrrolidin-1-yl substituted in the 2 position by
Rn), -CN, -SCN, Ph, heterocycle and benzyl. Rn is -C(0)Rj, -CH2ORj or -
C(O)NRjRj. Ro is Ph, substituted Ph, heterocycle or substituted heterocycle.
Rp is a heterocycle containing one or two substituents selected from
substituted Ph, heterocycle, Ph, benzyl, -SOnRo or SO2NRjRj. M is 0-3; n is
0-2; p is 0-7; X is S, O or N. A method is claimed of treating a mammalian
disease selected from cell apoptosis, immune deficiency syndromes, autoimmune
diseases, pathogenic infections, cardiovascular and neurol. injury, alopecia,
aging, cancer , Parkinson's disease, Alzheimer's disease, Huntington's
disease, acute and chronic neurodegenerative disorders, stroke, vascular
dementia, head trauma, ALS, neuromuscular disease, myocardial ischemia,
cardiomyopathy, macular degeneration, osteoarthritis, diabetes, acute liver
failure and spinal cord injury. Although caspase-3 inhibition and apoptosis
assay methods are described, quant. assay results are not given. Although the
methods of preparation are not claimed, 17 example prepns. are included.
ICM C07D239-95
ICS C07D405-06; C07D401-06; C07D403-06; A61K031-517; A61P035-00;
     C07D401-12; C07D403-12; C07D417-06; C07D405-04
28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
quinazolinol arylamino deriv prepn caspase 3 inhibitor;
apoptosis treatment arylaminoquinazolinol deriv
Nervous system
   (Huntington's chorea; preparation of 2-(arylamino)-4-quinazolinols
   for treatment of)
Nervous system
   (amyotrophic lateral sclerosis; preparation of
   2-(arylamino)-4-quinazolinols for treatment of)
Heart, disease
   (cardiomyopathy; preparation of 2-(arylamino)-4-quinazolinols for
   treatment of)
Nervous system
   (degeneration; preparation of 2-(arylamino)-4-quinazolinols for
   treatment of)
Mental disorder
   (dementia, vascular; preparation of 2-(arylamino)-4-
   quinazolinols for treatment of)
Nervous system
   (disease; preparation of 2-(arylamino)-4-quinazolinols
   for treatment of)
Liver, disease
   (failure; preparation of 2-(arylamino)-4-quinazolinols for
   treatment of)
Drug delivery systems
   (for 2-(arylamino)-4-quinazolinols as caspase-3 inhibitors)
Spinal cord
   (injury; preparation of 2-(arylamino)-4-quinazolinols for
   treatment of)
Heart, disease
   (ischemia; preparation of 2-(arylamino)-4-quinazolinols for
```

IC

ST

IT

IT

IT

IT.

IT

ΙT

ΙT

IT

IT

ΙT

IT

treatment of)

Eye, disease

```
(macula, degeneration; preparation of 2-(arylamino)-4-
        quinazolinols for treatment of)
IT
    Anti-Alzheimer's agents
    Anti-infective agents
    Antiarthritics
    Antidiabetic agents
    Antiparkinsonian agents
      Antitumor agents
       Cardiovascular agents
    Nervous system agents
        (preparation of 2-(arylamino)-4-quinazolinols as)
IT
     Aging, animal
    Alopecia
    Apoptosis
    Autoimmune disease
     Immunodeficiency
    Neuromuscular diseases
        (preparation of 2-(arylamino)-4-quinazolinols for treatment of)
IT
    Brain, disease
        (stroke; preparation of 2-(arylamino)-4-quinazolinols for
        treatment of)
IT
     Head
        (trauma; preparation of 2-(arylamino)-4-quinazolinols for
        treatment of)
ΙT
     1640-60-4P, 6-Chloro-2,4-dihydroxyquinazoline
                                                     17459-03-9P,
     N, N-Dimethyl-4-nitrobenzenesulfonamide
                                              20780-74-9P, 7-Bromoindoline-2,3-
             39576-83-5P, 2,4-Dichloro-8-methylquinazoline
                                                             67449-23-4P,
     2,4-Dihydroxy-8-methylquinazoline 101080-38-0P, N-(2-Bromophenyl)-2-
     (hydroxyimino) acetamide
                              104670-74-8P, Methyl 2-amino-3-bromobenzoate
     192218-38-5P, 8-(Bromomethyl)-2,4-dichloroquinazoline
                                                             309295-31-6P,
     8-Bromo-6-nitroquinazoline-2,4-diol
                                           331646-87-8P, 2-[(3,4-
     Dichlorophenyl)amino]-4-hydroxy-6-nitroquinazoline-8-carboxylic acid
     331646-89-0P, 2,4-Dihydroxy-6-nitroquinazoline-8-carboxylic acid
     331646-91-4P, Methyl 2,4-dihydroxy-6-nitroquinazoline-8-carboxylate
     331646-93-6P, Methyl 2,4-dichloro-6-nitroquinazoline-8-carboxylate
     331646-94-7P, Methyl 2-chloro-4-hydroxy-6-nitroquinazoline-8-carboxylate
     331646-98-1P
                    331646-99-2P, 8-Bromoquinazoline-2,4-diol
                                                                331647-00-8P.
     8-Bromo-2,4-dichloro-6-nitroquinazoline
                                               331647-05-3P,
                                      331647-09-7P, 8-Bromo-2-chloro-6-
     8-Bromo-2,4-dichloroquinazoline
                             331647-10-0P, 8-Bromo-6-methylquinazoline-2,4-diol
     methylquinazolin-4-ol
     331647-14-4P, 2-Amino-5-fluoro-3-iodobenzoic acid
                                                         331647-15-5P,
     2,4-Dihydroxy-6-fluoro-8-iodoquinazoline
                                                331647-16-6P,
     2,4-Dichloro-6-fluoro-8-iodoquinazoline
                                               331647-17-7P,
     2-Chloro-6-fluoro-8-iodoquinazolin-4-ol
                                               331647-21-3P,
     2-Chloro-8-(1,3-dioxolan-2-yl)-4-hydroxy-6-nitroquinazoline
     331647-22-4P, 2,4-Dichloro-6-nitroquinazoline-8-carboxaldehyde
     331647-23-5P, 8-(1,3-Dioxolan-2-yl)-6-nitroguinazoline-2,4-diol
     331647-26-8P, 2,6-Dichloro-8-[(N-benzyl-N-methylamino)sulfonyl]quinazolin-
            331647-27-9P, 6-Chloro-8-chlorosulfonyl-2,4-dihydroxyquinazoline
     331647-28-0P, 6-Chloro-8-[(N-methyl-N-benzylamino)sulfonyl]quinazoline-2,4-
            331647-29-1P, N-Methyl-N-benzyl(2,4,6-trichloroquinazolin-8-
     diol
                      331647-32-6P, 3-[2-(3,4-Dichlorophenylamino)-4-hydroxy-6-
     yl) sulfonamide
     nitroquinazolin-8-yl]propionic acid
                                           331647-33-7P, 3-(2,4-
     Dihydroxyquinazolin-8-yl)acrylic acid methyl ester
                                                          331647-34-8P,
     3-(2,4-Dihydroxyquinazolin-8-yl)propionic acid methyl ester
     331647-35-9P, 3-(2,4-Dihydroxy-6-nitroquinazolin-8-yl)propionic acid
                    331647-36-0P, 3-(2-Chloro-4-hydroxy-6-nitroquinazolin-8-
     methyl ester
     yl)propionic acid methyl ester
                                      331647-37-1P, N-(4-Fluorophenyl)-2-chloro-
     4-hydroxy-6-nitroquinazoline-8-carboxamide
                                                  331647-38-2P,
     2,4-Dihydroxyquinazoline-8-carboxylic acid methyl ester
                                                              331647-41-7P,
```

N-(4-Fluorophenyl)-2,4-dihydroxy-6-nitroquinazoline-8-carboxamide

```
331647-45-1P, 2-(4-Fluorophenyl)amino-4-hydroxy-6-nitroquinazoline-8-
     carboxylic acid
                       331647-46-2P, Methyl 2-(4-fluorophenyl)amino-4-hydroxy-6-
     nitroquinazoline-8-carboxylate
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of 2-(arylamino)-4-quinazolinols as
        inhibitors of cleavage of protein substrates by caspase-3)
     331642-39-8P
                    331642-40-1P
                                   331646-83-4P
IT
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
     (Reactant or reagent); USES (Uses)
        (preparation of 2-(arylamino)-4-quinazolinols as inhibitors of
        cleavage of protein substrates by caspase-3)
IT
     331640-99-4P, 6-Bromo-2-(3-chloro-4-methylphenylamino)-4-quinazolinol
     331641-00-0P, 8-Bromo-2-(3,4-dichlorophenylamino)-6-methyl-5-nitro-4-
     quinazolinol
                    331641-01-1P, 2-(3,4-Dichlorophenylamino)-8-(2-(1H-imidazol-
     2-yl)vinyl)-6-methyl-5-nitro-4-quinazolinol
                                                    331641-02-2P,
     2-(3,4-Dichlorophenylamino)-6-methyl-8-(2-(4-methylthiazol-5-yl)vinyl)-5-
     nitro-4-quinazolinol
                            331641-03-3P, 2-(3,4-Dichlorophenylamino)-6-methyl-
     5-nitro-8-(2-(4-pyridinyl)vinyl)-4-quinazolinol
                                                        331641-04-4P,
     8-Bromo-2-(3,4-dichlorophenylamino)-6-methyl-4-quinazolinol
     331641-05-5P, 8-(2-(3-Chlorophenyl)vinyl)-2-(3,4-dichlorophenylamino)-6-
     methyl-4-quinazolinol
                             331641-06-6P, 2-(3,4-Dichlorophenylamino)-6-methyl-
     8-(2-(4-pyridinyl)vinyl)-4-quinazolinol
                                                331641-07-7P,
     N-Benzyl-N-methyl-6-chloro-2-(3,4-dichlorophenylamino)-4-hydroxy-8-
     quinazolinecarboxamide
                               331641-08-8P, N-(4-(Fluorosulfonyl)phenyl)-6-
     chloro-2-(3,4-dichlorophenylamino)-4-hydroxy-8-quinazolinecarboxamide
     331641-09-9P, N-(3-Phenylpropyl)-6-chloro-2-(3,4-dichlorophenylamino)-4-
     hydroxy-8-quinazolinecarboxamide
                                         331641-10-2P, N-(4-Phenylbutyl)-6-
     chloro-2-(3,4-dichlorophenylamino)-4-hydroxy-8-quinazolinecarboxamide
     331641-11-3P, N-(3-Carboxycyclohexyl)-6-chloro-2-(3,4-dichlorophenylamino)-
     4-hydroxy-8-guinazolinecarboxamide
                                           331641-12-4P, N-Isopropyl-6-chloro-2-
     (3,4-dichlorophenylamino)-4-hydroxy-8-quinazolinecarboxamide
     331641-13-5P, N-(2,4-Dichlorobenzyl)-6-chloro-2-(3,4-dichlorophenylamino)-
     4-hydroxy-8-guinazolinecarboxamide
                                          331641-14-6P, N-(2-
     (Trifluoromethyl)benzyl)-6-chloro-2-(3,4-dichlorophenylamino)-4-hydroxy-8-
     quinazolinecarboxamide
                              331641-15-7P, N-(2-Methylbenzyl)-6-chloro-2-(3,4-
     dichlorophenylamino)-4-hydroxy-8-quinazolinecarboxamide
                                                                331641-16-8P,
     N-(2-Chlorobenzyl)-6-chloro-2-(3,4-dichlorophenylamino)-4-hydroxy-8-
     quinazolinecarboxamide
                               331641-17-9P, N-(2-Fluorobenzyl)-6-chloro-2-(3,4-
     dichlorophenylamino)-4-hydroxy-8-quinazolinecarboxamide
                                                                 331641-18-0P
     331641-19-1P
                     331641-20-4P
                                    331641-21-5P
                                                   331641-22-6P
                                                                   331641-23-7P
     331641-24-8P
                     331641-25-9P
                                    331641-26-0P
                                                   331641-27-1P
                                                                   331641-28-2P
                     331641-30-6P
                                    331641-31-7P
                                                   331641-32-8P
     331641-29-3P
                                                                   331641-33-9P
     331641-34-0P
                     331641-36-2P
                                    331641-38-4P
                                                   331641-40-8P
                                                                   331641-42-0P
     331641-44-2P
                     331641-46-4P
                                    331641-48-6P
                                                   331641-50-0P
                                                                   331641-52-2P
                     331641-56-6P
                                    331641-58-8P
     331641-54-4P
                                                   331641-60-2P
                                                                   331641-62-4P
     331641-65-7P
                     331641-67-9P
                                    331641-69-1P
                                                   331641-71-5P
                                                                   331641-73-7P
     331641-75-9P
                     331641-77-1P
                                    331641-79-3P
                                                   331641-81-7P
                                                                   331641-83-9P
     331641-85-1P
                     331641-87-3P
                                    331641-89-5P
                                                   331641-91-9P
                                                                   331641-93-1P
     331641-95-3P
                     331641-97-5P
                                    331641-98-6P
                                                   331642-00-3P
                                                                   331642-02-5P
                     331642-06-9P
                                    331642-08-1P
                                                   331642-10-5P
     331642-04-7P
                                                                   331642-12-7P
     331642-14-9P
                     331642-16-1P
                                    331642-18-3P
                                                   331642-20-7P
                                                                   331642-22-9P
     331642-24-1P
                     331642-26-3P
                                    331642-28-5P
                                                   331642-30-9P
                                                                   331642-32-1P
     331642-34-3P
                     331642-35-4P
                                    331642-36-5P
                                                   331642-37-6P
                                                                   331642-38-7P
     331642-41-2P
                     331642-42-3P
                                    331642-43-4P
                                                   331642-44-5P
                                                                   331642-45-6P
     331642-46-7P
                     331642-47-8P
                                    331642-48-9P
                                                   331642-49-0P
                                                                   331642-50-3P
                     331642-52-5P
                                    331642-53-6P
     331642-51-4P
                                                   331642-54-7P
                                                                   331642-55-8P
```

```
331642-56-9P
               331642-57-0P
                               331642-58-1P
                                               331642-59-2P
                                                              331642-60-5P
               331642-62-7P
                               331642-63-8P
                                              331642-64-9P
                                                              331642-65-0P
331642-61-6P
                                               331642-69-4P
                                                              331642-70-7P
331642-66-1P
               331642-67-2P
                               331642-68-3P
                                                              331642-75-2P
331642-71-8P
                               331642-73-0P
                                               331642-74-1P
               331642-72-9P
331642-76-3P
               331642-77-4P
                               331642-78-5P
                                               331642-80-9P
                                                              331642-82-1P
331642-86-5P
               331642-87-6P
                               331642-90-1P
                                               331642-93-4P
                                                              331642-96-7P
331642-99-0P
               331643-02-8P
                               331643-05-1P
                                               331643-07-3P
                                                              331643-09-5P
               331643-12-0P
                               331643-14-2P
                                               331643-15-3P
                                                              331643-17-5P
331643-10-8P
331643-19-7P
               331643-20-0P
                               331643-21-1P
                                               331643-22-2P
                                                              331643-23-3P
331643-24-4P
               331643-25-5P
                               331643-26-6P
                                               331643-27-7P
                                                              331643-28-8P
                                                              331643-33-5P
331643-29-9P
               331643-30-2P
                               331643-31-3P
                                               331643-32-4P
331643-34-6P
               331643-35-7P
                               331643-36-8P
                                               331643-37-9P
                                                              331643-38-0P
331643-39-1P
               331643-40-4P
                               331643-41-5P
                                               331643-42-6P
                                                              331643-43-7P
331643-44-8P
               331643-45-9P
                               331643-46-0P
                                               331643-47-1P
                                                              331643-48-2P
331643-49-3P
               331643-50-6P
                               331643-51-7P
                                               331643-52-8P
                                                              331643-53-9P
                               331643-56-2P
331643-54-0P
               331643-55-1P
                                               331643-57-3P
                                                              331643-58-4P
331643-59-5P
               331643-60-8P
                               331643-61-9P
                                               331643-62-0P
                                                              331643-63-1P
331643-64-2P
               331643-65-3P
                               331643-66-4P
                                               331643-67-5P
                                                              331643-68-6P
331643-69-7P
               331643-70-0P
                               331643-71-1P
                                               331643-72-2P
                                                              331643-73-3P
331643-74-4P
               331643-75-5P
                               331643-76-6P
                                               331643-77-7P
                                                              331643-78-8P
331643-79-9P
               331643-80-2P
                               331643-81-3P
                                               331643-82-4P
                                                              331643-83-5P
331643-84-6P
               331643-85-7P
                               331643-86-8P
                                               331643-87-9P
                                                              331643-88-0P
331643-89-1P
               331643-90-4P
                               331643-91-5P
                                               331643-92-6P
                                                              331643-93-7P
331643-94-8P
               331643-95-9P
                               331643-96-0P
                                               331643-97-1P
                                                              331643-98-2P
                                               331644-06-5P
331643-99-3P
               331644-01-0P
                               331644-03-2P
                                                              331644-08-7P
331644-10-1P
               331644-12-3P
                               331644-14-5P
```

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(<u>preparation</u> of 2-(arylamino)-4-quinazolinols as inhibitors of cleavage of protein substrates by caspase-3)

IT

```
331644-15-6P
               331644-16-7P
                               331644-17-8P
                                               331644-18-9P
                                                              331644-19-0P
331644-20-3P
               331644-21-4P
                               331644-22-5P
                                               331644-23-6P
                                                              331644-24-7P
                                               331644-28-1P
331644-25-8P
               331644-26-9P
                               331644-27-0P
                                                              331644-29-2P
331644-30-5P
               331644-31-6P
                               331644-32-7P
                                               331644-33-8P
                                                              331644-34-9P
331644-35-0P
               331644-36-1P
                               331644-37-2P
                                               331644-38-3P
                                                              331644-39-4P
331644-40-7P
               331644-41-8P
                               331644-42-9P
                                               331644-43-0P
                                                              331644-44-1P
331644-45-2P
                                               331644-48-5P
               331644-46-3P
                               331644-47-4P
                                                              331644-49-6P
331644-50-9P
               331644-51-0P
                               331644-52-1P
                                               331644-53-2P
                                                              331644-54-3P
331644-55-4P
               331644-56-5P
                               331644-57-6P
                                               331644-58-7P
                                                               331644-59-8P
331644-60-1P
               331644-61-2P
                               331644-62-3P
                                               331644-63-4P
                                                              331644-64-5P
331644-65-6P
                                               331644-71-4P
                                                              331644-72-5P
               331644-67-8P
                               331644-69-0P
331644-74-7P
               331644-77-0P
                               331644-79-2P
                                               331644-82-7P
                                                               331644-84-9P
331644-86-1P
               331644-89-4P
                               331644-90-7P
                                               331644-92-9P
                                                               331644-94-1P
                               331644-98-5P
331644-96-3P
               331644-97-4P
                                               331645-01-3P
                                                               331645-02-4P
               331645-04-6P
                               331645-05-7P
331645-03-5P
                                               331645-06-8P
                                                               331645-07-9P
331645-08-0P
               331645-09-1P
                               331645-10-4P
                                               331645-11-5P
                                                               331645-12-6P
331645-13-7P
               331645-14-8P
                               331645-15-9P
                                               331645-16-0P
                                                               331645-17-1P
331645-18-2P
               331645-19-3P
                               331645-20-6P
                                               331645-21-7P
                                                               331645-22-8P
331645-23-9P
               331645-24-0P
                               331645-25-1P
                                               331645-26-2P
                                                               331645-27-3P
331645-28-4P
               331645-29-5P
                               331645-30-8P
                                               331645-31-9P
                                                               331645-32-0P
331645-33-1P
               331645-34-2P
                               331645-35-3P
                                               331645-36-4P
                                                               331645-37-5P
               331645-39-7P
                               331645-40-0P
331645-38-6P
                                               331645-41-1P
                                                               331645-42-2P
331645-43-3P
               331645-44-4P
                               331645-45-5P
                                               331645-46-6P
                                                               331645-47-7P
331645-48-8P
               331645-49-9P
                               331645-50-2P
                                               331645-51-3P
                                                               331645-52-4P
331645-53-5P
               331645-54-6P
                               331645-55-7P
                                               331645-56-8P
                                                               331645-57-9P
331645-58-0P
               331645-59-1P
                               331645-60-4P
                                               331645-61-5P
                                                               331645-62-6P
331645-63-7P
               331645-64-8P
                               331645-65-9P
                                               331645-66-0P
                                                               331645-67-1P
331645-68-2P
               331645-69-3P
                               331645-70-6P
                                               331645-71-7P
                                                               331645-72-8P
331645-73-9P
               331645-74-0P
                               331645-75-1P
                                               331645-76-2P
                                                               331645-77-3P
```

```
331645-78-4P
                    331645-79-5P
                                   331645-80-8P
                                                  331645-81-9P
                                                                  331645-82-0P
     331645-83-1P
                    331645-84-2P
                                   331645-85-3P
                                                  331645-86-4P
                                                                  331645-87-5P
                    331645-89-7P
                                                  331645-91-1P
     331645-88-6P
                                   331645-90-0P
                                                                  331645-92-2P
     331645-93-3P
                    331645-94-4P
                                   331645-95-5P
                                                  331645-96-6P
                                                                  331645-97-7P
     331645-98-8P
                    331645-99-9P
                                   331646-00-5P
                                                  331646-01-6P
                                                                  331646-02-7P
                    331646-04-9P
                                   331646-05-0P
                                                  331646-06-1P
                                                                  331646-07-2P
     331646-03-8P
     331646-08-3P
                    331646-09-4P
                                   331646-10-7P
                                                  331646-11-8P
                                                                  331646-12-9P
     331646-13-0P
                    331646-14-1P
                                   331646-15-2P
                                                  331646-16-3P
                                                                  331646-17-4P
                                   331646-20-9P
                                                  331646-21-0P
                                                                  331646-22-1P
     331646-18-5P
                    331646-19-6P
     331646-23-2P
                    331646-24-3P
                                   331646-25-4P
                                                  331646-26-5P
                                                                  331646-27-6P
                    331646-29-8P
     331646-28-7P
                                   331646-30-1P
                                                  331646-31-2P
                                                                  331646-32-3P
                                   331646-35-6P
                                                  331646-36-7P
     331646-33-4P
                    331646-34-5P
                                                                  331646-37-8P
     331646-38-9P
                    331646-39-0P
                                   331646-40-3P
                                                  331646-41-4P
                                                                  331646-42-5P
                    331646-44-7P
                                   331646-45-8P
                                                  331646-46-9P
                                                                  331646-47-0P
     331646-43-6P
                                   331646-50-5P
                                                  331646-51-6P
                                                                  331646-52-7P
     331646-48-1P
                    331646-49-2P
     331646-53-8P
                    331646-54-9P
                                   331646-55-0P
                                                  331646-56-1P
                                                                  331646-57-2P
     331646-58-3P
                    331646-59-4P
                                   331646-60-7P
                                                  331646-61-8P
                                                                  331646-62-9P
     331646-63-0P
                    331646-64-1P
                                   331646-65-2P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of 2-(arylamino)-4-quinazolinols as inhibitors of
        cleavage of protein substrates by caspase-3)
IT
     331646-66-3P
                    331646-67-4P
                                   331646-68-5P
                                                  331646-69-6P
                                                                  331646-70-9P
     331646-71-0P
                    331646-72-1P
                                   331646-73-2P
                                                  331646-74-3P
                                                                  331646-75-4P
     331646-76-5P
                    331646-78-7P
                                   331646-80-1P
                                                  331646-81-2P
                                                                  331646-85-6P
     331647-01-9P, 4-[(1E)-2-[2-[(3,4-Dichlorophenyl)amino]-4-hydroxy-6-
                                              331647-02-0P,
     nitroquinazolin-8-yl]vinyl]benzoic acid
     8-[(1E)-2-(2-Pyridyl)vinyl]-2-[(3,4-dichlorophenyl)amino]-6-
                            331647-06-4P, 4-[(1E)-2-[2-[(3,4-
     nitroquinazolin-4-ol
     Dichlorophenyl)amino]-4-hydroxyquinazolin-8-yl]vinyl]phenyl acetate
     331647-11-1P, 8-[(1E)-2-(3-Chlorophenyl)vinyl]-2-[(3,4-
     dichlorophenyl)amino]-6-methylguinazolin-4-ol
                                                     331647-12-2P,
     8-[(1E)-2-(4-Pyridyl)vinyl]-2-[(3,4-dichlorophenyl)amino]-6-methyl-5-
     nitroquinazolin-4-ol 331647-13-3P, 8-[(1E)-2-(4-Methylphenyl)vinyl]-2-
     [(3,4-dichlorophenyl)amino]-6-fluoroquinazolin-4-ol 331647-18-8P,
     8-[(1E)-2-(2-Methylphenyl)vinyl]-2-[(3,4-dichlorophenyl)amino]-6-
                            331647-19-9P, 8-[(1E)-2-(Pyrid-4-yl)vinyl]-2-[(3,4-
     fluoroquinazolin-4-ol
     dichlorophenyl)amino]-6-fluoroquinazolin-4-ol
                                                   331647-20-2P,
     4-[(1E)-2-[2-[(3,4-Dichlorophenyl)amino]-6-fluoro-4-hydroxyquinazolin-8-
     yl]vinyl]phenyl acetate
                              331647-24-6P, N,N-Dimethyl-(2E)-3-[2-[(3,4-
     dichlorophenyl)amino]-4-hydroxy-6-nitroquinazolin-8-yl]prop-2-enamide
     331647-30-4P, N-(4-Chlorophenyl)-3-[2-(3,4-dichlorophenylamino)-4-hydroxy-
     6-nitroquinazolin-8-yl]propionamide
                                           331647-39-3P
                                                          331647-42-8P,
     N-(4-Fluorophenyl)-2-[(3,4-dichlorophenyl)-N-methylamino]-4-hydroxy-6-
     nitroquinazoline-8-carboxamide
                                      331647-48-4P
                                                     331647-50-8P
     331647-51-9P
                    331647-53-1P
                                   331664-95-0P
                                                  331681-70-0P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of 2-(arylamino)-4-quinazolinols as inhibitors of
        cleavage of protein substrates by caspase-3)
ΙT
     169592-56-7, Caspase-3
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (preparation of 2-(arylamino)-4-quinazolinols as inhibitors of
        cleavage of protein substrates by caspase-3)
IT
     77-48-5, 1,3-Dibromo-5,5-dimethylhydantoin
                                                  95-76-1, 3,4-Dichloroaniline
                                98-74-8, 4-Nitrobenzenesulfonyl chloride
     96-33-3, Methyl acrylate
     100-43-6, 4-Vinylpyridine 103-67-3, N-Benzylmethylamine
```

```
140-75-0, 4-Fluorobenzylamine
                                                          371-40-4,
    4-Chlorobenzylamine
     4-Fluoroaniline 446-08-2, 2-Amino-5-fluorobenzoic acid 455-14-1,
                              615-36-1, 2-Bromoaniline
     4-Trifluoromethylaniline
                                                          622-97-9,
                      635-21-2, 2-Amino-5-chlorobenzoic acid
    4-Methylstyrene
                                                               1075-49-6,
     4-Vinylbenzoic acid
                         1709-59-7, 4-(N,N-Dimethylsulfamoyl)aniline
    2039-85-2, 3-Chlorostyrene 2357-47-3, 4-Fluoro-3-
     (trifluoromethyl)aniline 2628-16-2, 4-Acetoxystyrene
                                                             4389-45-1,
     2-Amino-3-methylbenzoic acid 20173-24-4, 3-(2-Aminoethyl)pyridine
     40750-59-2, N-Methyl-3,4-dichloroaniline 206551-32-8, Methyl
    2-amino-3-bromo-5-methylbenzoate 331646-97-0, 8-Bromo-2-chloro-6-
    nitroquinazolin-4-ol 331647-04-2, 8-Bromo-2-chloroquinazolin-4-ol
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; preparation of 2-(arylamino)-4-quinazolinols
        as inhibitors of cleavage of protein substrates by caspase-3)
REFERENCE COUNT:
                         11
                              THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 16 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                        2000:573773 HCAPLUS Full-text
DOCUMENT NUMBER:
                        133:177025
                        Preparation of arylacrylamides and related
TITLE:
                        compounds as inhibitors of Factor Xa.
                        Song, Yonghong; Zhu, Bing-yan; Scarborough, Robert M.;
INVENTOR(S):
                        Clizbe, Lane; Jia, Zhaozhong Jon; Su, Ting; Teng,
                        Willy
                        Cor Therapeutics Inc., USA
PATENT ASSIGNEE(S):
SOURCE:
                         PCT Int. Appl., 159 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
                        2
PATENT INFORMATION:
     PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
                        ____
                                           _____
                                                                  _____
                               _____
                         A2
                                           WO 2000-US3405
     WO 2000047554
                               20000817
                                                                  20000211 <--
                               20010809
     WO 2000047554
                         A3
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,
             MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,
             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ,
             BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
             DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
             CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                                                  20000211 <--
     CA 2361428
                         A1
                                20000817
                                          CA 2000-2361428
     EP 1159264
                                20011205
                                           EP 2000-917623
                         A2
                                                                  20000211 <--
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
                             20020604
                                           US 2000-501371
     US 6399627
                         В1
                                                                  20000211 <---
                                                                  20000211 <--
     JP 2002536432
                         T
                                20021029
                                           JP 2000-598475
                                           US 2000-501370
                         В1
                                20030408
     US 6545054
                                                                  20000211 <--
                                                             P 19990211 <--
PRIORITY APPLN. INFO.:
                                           US 1999-119640P
                                           WO 2000-US3405
                                                              W 20000211 <--
```

OTHER SOURCE(S): MARPAT 133:177025

ED Entered STN: 18 Aug 2000

AB ABDECG1:CG2KL [A = (substituted) Ph, naphthyl, (aromatic) heterocyclyl; B = bond, CO, NR3, CR3aR3b, CONR3, SO2, O, SO2NR, NR3SO2, etc.; R3, R3a, R3b = H, alkyl, alkenyl, alkynyl, cycloalkyl, alkylphenyl, etc.; D = (substituted) Ph,

IC

CC

ST

IT

IT

IT

IT

288308-69-0P

288308-70-3P

```
heteroaryl; E = bond, CO, CONR5, SO2NR5, CH2SO2, etc.; R5 = H, OH, alkoxy,
alkyl, alkenyl, alkynyl, cycloalkyl, alkylphenyl, etc.; K = (substituted) Ph,
naphthyl, mono- or bicyclic heterocyclyl; L = H, cyano, CONR12R13,
(CH2) nNR12R13, etc.; n = 0-2; R12, R13 = H, OR14, NR14R15, alkyl,
(substituted) alkylphenyl, alkylnaphthyl, etc.; R14, R15 = H, alkyl,
alkoxycarbonyl, CONH2, alkyl, etc.; G1, G2 = H, halo, alkyl, haloalkyl, cyano,
NO2, alkenyl, alkynyl, cycloalkyl, cyanoalkyl, etc.], were prepared as
inhibitors of Factor Xa (no data). Thus, [[2-(4-
aminophenyl)phenyl]sulfonyl]tert-butylamine (preparation given) in CH2Cl2 was
treated with Me3Al in hexane and then with Me 3-(3-cyanophenyl)acrylate to
give 19% N-[4-[(2-tert-butylaminosulfonyl)phenyl]phenyl]-3-(3-
cyanophenyl)acrylamide. The latter in MeOH was treated with HCl to give a
residue which was refluxed with NH4OAc in MeOH to give 35% (2E)-N-[4-[(2-
aminosulfonyl)phenyl]-3-(3- amidinophenyl)-3-acrylamide.
    C07C311-46
    C07D213-58; C07C257-18; C07D231-56; C07D239-94; C07D217-22;
     C07D401-12; C07D231-12; C07D307-54; A61K031-16; A61K031-18;
     A61K031-33; A61P007-02
25-19 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1, 27, 28
arylacrylamide prepn Factor Xa inhibitor;
aminosulfonylphenylphenylamidinophenylacrylamide prepn Factor Xa
inhibitor; antithrombotic amidinophenylacrylamide prepn
Anticoagulants
   (preparation of arylacrylamides and related compds. as inhibitors
   of Factor Xa)
9002-05-5, Factor Xa
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC
(Miscellaneous); BIOL (Biological study); PROC (Process)
   (inhibitors; \underline{\textbf{preparation}} of arylacrylamides and related compds. as
   inhibitors of Factor Xa)
288309-80-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
   (preparation of arylacrylamides and related compds. as inhibitors
   of Factor Xa)
288307-81-3DP, derivs.
                         288307-81-3P
                                        288307-83-5DP, derivs.
288307-83-5P
               288307-84-6DP, derivs.
                                        288307-84-6P
                                                       288307-85-7DP,
          288307-85-7P
                         288307-86-8P
                                        288307-87-9P
                                                       288307-88-0P
derivs.
288307-89-1P
               288307-90-4P
                              288307-91-5P
                                             288307-92-6P
                                                            288307-93-7P
288307-94-8P
               288307-95-9P
                              288307-96-0P
                                             288307-97-1P
                                                             288307-98-2P
                                             288308-02-1P
288307-99-3P
               288308-00-9P
                              288308-01-0P
                                                            288308-03-2P
288308-04-3P
               288308-05-4P
                              288308-06-5P
                                             288308-07-6P
                                                            288308-08-7P
288308-09-8P
               288308-10-1P
                              288308-13-4P
288308-14-5P
               288308-15-6P
                              288308-16-7DP, derivs.
                                                       288308-16-7P
288308-17-8P
               288308-18-9P
                              288308-19-0P
                                             288308-20-3P
                                                            288308-21-4P
288308-22-5DP, derivs.
                         288308-22-5P
                                        288308-23-6DP, derivs.
288308-23-6P
               288308-24-7DP, derivs.
                                        288308-24-7P
                                                       288308-25-8DP,
          288308-25-8P
                         288308-26-9P
                                        288308-27-0P
derivs.
                                                       288308-28-1P
288308-29-2P
               288308-30-5P
                              288308-31-6P
                                             288308-32-7P
                                                            288308-33-8P
288308-34-9P
               288308-35-0P
                              288308-36-1P
                                             288308-37-2P
                                                             288308-38-3P
288308-39-4P
               288308-40-7P
                              288308-41-8P
                                             288308-42-9P
                                                            288308-43-0P
288308-44-1P
               288308-45-2P
                              288308-46-3P
                                             288308-47-4P
                                                            288308-48-5P
288308-49-6P
               288308-50-9P
                              288308-51-0P
                                             288308-52-1P
                                                             288308-53-2P
288308-54-3P
               288308-55-4P
                              288308-56-5P
                                             288308-57-6P
                                                             288308-58-7P
               288308-60-1P
288308-59-8P
                              288308-61-2P
                                             288308-62-3P
                                                             288308-63-4P
288308-64-5P
               288308-65-6P
                              288308-66-7P
                                             288308-67-8P
                                                            288308-68-9P
```

288308-72-5DP, derivs.

288308-71-4P

288308-75-8P

288308-76-9P

288308-74-7P

288308-72-5P

288308-73-6P

```
288308-81-6P
     288308-77-0P
                    288308-78-1P
                                   288308-79-2P
                                                  288308-80-5P
     288308-82-7P
                    288308-83-8P
                                   288308-84-9P
                                                  288308-85-0P
                                                                 288308-86-1P
     288308-87-2P
                    288308-88-3P
                                   288308-89-4P
                                                  288308-90-7P
                                                                 288308-91-8P
     288308-92-9P
                    288308-93-0P
                                   288308-94-1P
                                                  288308-95-2P
                                                                 288308-96-3P
     288309-42-2P
                    288309-54-6P
                                   288309-55-7P
                                                  288309-56-8P
                                                                 288309-57-9P
     288309-58-0P
                    288309-59-1P
                                   288309-60-4P
                                                  288309-61-5P
                                                                 288309-62-6P
                                   288309-65-9P
                                                  288309-66-0P
                                                                 288309-67-1P
     288309-63-7P
                    288309-64-8P
     288309-68-2P
                    288309-69-3P
                                   288309-70-6P
                                                  288309-71-7P
                                                                 288309-72-8P
     288309-73-9P
                    288309-74-0P
                                   288309-75-1P
                                                  288309-76-2P
                                                                 288309-77-3P
     288309-78-4P
                    288309-79-5P
                                   288309-81-9P
                                                  288309-82-0P
                                                                 288309-83-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of arylacrylamides and related compds. as inhibitors
        of Factor Xa)
                                    98-09-9, Benzenesulfonyl chloride
IT
     79-30-1, Isobutyryl chloride
     106-40-1, 4-Bromoaniline 141-97-9, Ethyl acetoacetate
                                                               288-13-1,
                372-31-6, Ethyl trifluoroacetoacetate
                                                        590-97-6, Bromomethyl
     acetate
               611-10-9, Ethyl 2-oxocyclopentanecarboxylate
                                                              615-36-1,
     2-Bromoaniline 1007-15-4, 3-Bromo-4-fluoroacetophenone
                                                                2356-16-3
     2605-67-6, Methoxycarbonylmethylenetriphenylphosphorane
                                                               3473-63-0,
     Formamidine acetate
                           3699-66-9, Triethyl 2-phosphonopropionate
     6136-68-1, 3-Acetylbenzonitrile 7664-66-6, 4-Isopropoxyaniline
     24964-64-5, 3-Cyanobenzaldehyde 41051-15-4, Methyl 4-methoxy-3-
                    42726-73-8, tert-Butyl methyl malonate
                                                             54401-85-3, Ethyl
     4-pyridylacetate
                        58794-09-5, 7-Bromoisoquinoline
                                                          88738-78-7
     97674-02-7
                  107905-52-2
                                134209-02-2
                                              150255-96-2, 3-Cyanophenylboronic
            203512-83-8
                          209919-51-7
                                        288309-49-9
                                                      288309-51-3
                                                                   288309-52-4
     acid
     288309-53-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of arylacrylamides and related compds. as inhibitors
        of Factor Xa)
                  29632-73-3P, 2-Bromo-4-iodoaniline
                                                       50916-55-7P.
IT
     3-(2-Bromoacetyl)benzonitrile
                                     52116-81-1P
                                                   122539-74-6P
                                                                  125873-00-9P
     150691-04-6P
                    161801-48-5P
                                   193006-34-7P
                                                  197792-47-5P
                                                                 203512-82-7P
                                   215453-51-3P, 7-Bromo-1-chloroisoguinoline
     209917-94-2P
                    215453-50-2P
     215453-52-4P, 7-Bromo-1-phenoxyisoquinoline
                                                   215453-53-5P,
     1-Amino-7-bromoisoquinoline
                                   258333-33-4P
                                                  288308-97-4P
                                                                 288308-98-5P
     288308-99-6P
                    288309-00-2P
                                   288309-01-3P
                                                  288309-02-4P
                                                                 288309-03-5P
     288309-04-6P
                                                  288309-07-9P,
                    288309-05-7P
                                   288309-06-8P
     3-Cyano-4-fluoroacetophenone
                                    288309-08-0P
                                                   288309-09-1P
                                                                  288309-10-4P,
     7-Acetylisoquinoline
                            288309-11-5P
                                           288309-12-6P
                                                          288309-13-7P
     288309-14-8P
                    288309-15-9P
                                   288309-16-0P
                                                  288309-18-2P
                                                                 288309-19-3P
     288309-20-6P
                    288309-21-7P
                                   288309-22-8P
                                                  288309-23-9P
                                                                 288309-24-0P
                    288309-26-2P
                                   288309-27-3P
     288309-25-1P
                                                  288309-28-4P
                                                                 288309-29-5P
     288309-30-8P
                    288309-31-9P
                                   288309-32-0P
                                                  288309-33-1P
                                                                 288309-34-2P
     288309-35-3P
                    288309-36-4P
                                   288309-37-5P
                                                  288309-38-6P
                                                                 288309-39-7P
     288309-40-0P
                    288309-41-1P
                                   288309-43-3P
                                                  288309-44-4P
                                                                 288309-45-5P
                    288309-47-7P
                                   288309-48-8P
                                                  288309-50-2P
     288309-46-6P
                                                                 288309-84-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of arylacrylamides and related compds. as inhibitors
        of Factor Xa)
L119 ANSWER 17 OF 34
                      HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         2000:475644 HCAPLUS Full-text
DOCUMENT NUMBER:
                         133:89443
TITLE:
                         Quinolinecarboxamides as antiviral agents, especially
```

against viruses of the herpes family

INVENTOR(S): Turner, Steven Ronald; Strohbach, Joseph Walter;

Thaisrivongs, Suvit; Vaillancourt, Valerie A.;

Schnute, Mark E.; Tucker, John Alan

PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA

SOURCE:

LANGUAGE:

PCT Int. Appl., 219 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

								APPLICATION NO.										
	2000															9991:	222	<
	W:	ΑE,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,	
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	
		IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	ΜA,	
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	
		SK,	SL,	ТJ,	TM,	TR,	TT,	ΤZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW		
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	
		DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	
											, SN,							
US	6248	739														9991	217	<
CA	2353	636			A1		2000	0713	(	CA 1	1999-	2353	636					<
EP	1140	850			<b>A</b> 1		2001	1010		EP 3	1999-	9671	45	•	1	9991	222	<
	EP 1140850 R: AT, B				DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	•												
TR	IE, S TR 200101906				Т2		2001	1221	•	TR 2	2001-	2001	0190	6	1.	9991	222	<
	2002						2002	0629	]	HU 2	2002-	308			1	9991	222	<
HU	2002	0030	8		A3		2003	0328										
JP	2002	5344	16		${f T}$		2002	1015		JP 2	2000-	5922	70		1:	9991	222	<
AU	7602	07			В2		2003	0508		AU 2	2000-	2348	6		1	9991	222	<
NZ	5128	24			Α		2003	0926		NZ I	1999-	5128	24		1:	9991	222	<
BR	9916		Α		2004	0615		BR 3	1999-	1677	2		1	9991	222	<		
ZA	ZA 2001004711				Α		2002	0610		ZA 2	2001-	4711			2	0010	608	<
NO	2001	0033	83		Α		2001	0907	1	NO 2	2001-	3383			2	0010	706	<
RIORIT	Y APP	LN.	INFO	.:					1	US :	1999-	1153	01P		P 1	9990	108	<
									1	US :	1999-	1406	10P		P 1	9990	623	<
									1	WO :	1999-	US27	960	,	W 1:	9991	222	<

OTHER SOURCE(S): MARPAT 133:89443

Entered STN: 14 Jul 2000

The invention provides quinolinecarboxamides I (X = O, S; W = R2, etc., where AB R1-R6 = a wide variety of defined groups, with 125 examples), e.g., hydroxypropynyl derivative II, and their pharmaceutically acceptable salts which are useful as antiviral agents, in particular, as agents against viruses of the herpes family. Activities of the compds. against HCMV, HSV, and VZV polymerase are presented. Pharmaceutical compns. comprising compds. I are claimed (no examples).

IC ICM C07D215-16

> ICS C07D215-18; C07D215-22; C07D215-36; C07D215-38; C07D215-58; C07D215-233; A61K031-47; A61P031-12

- CC 27-17 (Heterocyclic Compounds (One Hetero Atom))
  - Section cross-reference(s): 1, 63
- ST quinolinecarboxamide prepn antiviral agent; herpes virus quinolinecarboxamide antiviral agent
- IT Amides, preparation

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(quinolinecarboxamides; preparation of quinolinecarboxamides as antiviral agents)

29943-42-8, Tetrahydro-4H-pyran-4-one

IT

```
RL: RCT (Reactant); RACT (Reactant or reagent)
        (conversion to oxazepanone and for preparation of
        quinolinecarboxamide derivs.)
     57-14-7, 1,1-Dimethylhydrazine 75-26-3, 2-Bromopropane
IT
                                                               87-13-8.
     Diethyl ethoxymethylenemalonate 100-11-8, 4-Nitrobenzyl bromide
     102-71-6, reactions 104-63-2, N-Benzylethanolamine
                          106-93-4, 1,2-Dibromoethane
     4-Chlorobenzylamine
                                                        107-08-4,
                                                  110-65-6, 1,4-Butynediol
     1-Iodopropane 107-19-7, Propargyl alcohol
               110-77-0, Ethyl 2-hydroxyethyl sulfide
                                                        110-91-8, Morpholine,
     110-73-6
                                      111-90-0,
                111-46-6, reactions
     reactions
     2-Ethoxy-(2-ethoxy)ethanol 112-35-6, Triethyleneglycol monomethyl ether
                                    350-46-9, 1-Fluoro-4-nitrobenzene
     140-75-0, 4-Fluorobenzylamine
     352-34-1, 4-Fluoroiodobenzene
                                    505-10-2, 3-Methylthiopropanol
                                                                     513-48-4,
     2-Iodobutane
                    540-37-4, 4-Iodoaniline 615-43-0, 2-Iodoaniline
                                   628-89-7, 2-(2-Chloroethoxy) ethanol
     622-08-2, 2-Benzyloxyethanol
     699-12-7, 2-Hydroxyethyl phenyl sulfide
                                             881-95-8, dl-Metanephrine
                   927-74-2, 3-Butyn-1-ol
                                             1069-72-3
     hydrochloride
                                                         1445-73-4,
     N-Methyl-4-piperidone 1479-24-9, Ethyl 3-(2-fluorophenyl)-3-
     oxopropanoate
                    2008-75-5, 1-(2-Chloroethyl)piperidine hydrochloride
     2213-43-6, 1-Aminopiperidine 2373-51-5, Chloromethyl methyl sulfide
     3647-69-6, N-(2-Chloroethyl)morpholine hydrochloride
                                                          3970-21-6,
     2-Methoxyethoxymethyl chloride 4261-68-1, 2-(Diisopropylamino)ethyl
     chloride hydrochloride
                            4319-49-7, 4-Aminomorpholine
                                                           4584-46-7,
     Dimethylaminoethyl chloride hydrochloride
                                                5188-07-8, Sodium
                     5292-43-3, tert-Butyl bromoacetate
                                                         5407-04-5,
     thiomethoxide
     3-Dimethylaminopropyl chloride hydrochloride
                                                    5466-88-6,
     (2H) 1, 4-Benzoxazin-3(4H) -one
                                  5472-49-1, N-(3-Chloropropyl)piperidine
                     6148-64-7, Potassium ethyl malonate
                                                          6542-54-7
     hydrochloride
     6589-55-5, \alpha-(Methylaminomethyl)benzyl alcohol
                                                      6928-85-4,
     1-Amino-4-methylpiperazine
                                 6972-79-8, 1,3-Dibenzyloxy-2-propanol
     7205-90-5, Chloromethyl 4-chlorophenyl sulfide 7205-91-6, Chloromethyl
     phenyl sulfide 7250-67-1, 1-(2-Chloroethyl)pyrrolidine hydrochloride
     10595-09-2, 3,3'-Thiodipropanol
                                     16589-24-5, Synephrine 16596-41-1,
                         17201-43-3, 4-(Bromomethyl)benzonitrile
     1-Aminopyrrolidine
                                                                   18621-18-6,
     3-Azetidinol hydrochloride 21151-56-4, \alpha,4-Dichloroanisole
     26177-44-6, 4-Bromobenzylamine hydrochloride
                                                   27374-25-0,
                                                 29632-74-4,
     [(1-Ethoxycyclopropyl)oxy]trimethylsilane
                             31560-06-2
                                          33821-94-2, 2-(3-
     2-Fluoro-4-iodoaniline
     Bromopropoxy) tetrahydro-2H-pyran
                                       50586-80-6, 2-(2-Methoxyethoxy) ethyl
                          54288-69-6, 2-Chloromethyl-1-methylpyrrolidine
     p-toluenesulfonate
     hydrochloride
                     58305-05-8
                                 72748-99-3, (R)-1-Amino-2-
     (methoxymethyl)pyrrolidine 79099-07-3, 1-(tert-Butoxycarbonyl)-4-
                84466-87-5, 4-(Azidomethyl)benzonitrile
     piperidone
                                                          117924-33-1
     121838-84-4 132091-42-0 281652-58-2, 2-Chloro-5-iodobenzoyl chloride
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (for preparation of quinolinecarboxamide derivs.)
     2767-70-6P, 4-Nitrobenzyltriphenylphosphonium bromide
IT
                                                             5638-60-8P
     6425-46-3P, 4-(4-Nitrobenzyl)morpholine
                                             10406-25-4P,
     4-(Aminomethyl)benzonitrile
                                  21987-29-1P, 4,4-Difluoropiperidine
     51013-67-3P, 4-(4-Aminobenzyl)morpholine 101184-85-4P
                                                             124700-41-0P,
     2-Fluoro-5-iodobenzoic acid 281651-96-5P, N-Cyclopropyl-4-iodoaniline
     281652-00-4P
                    281652-01-5P
                                   281652-05-9P
                                                281652-10-6P, tert-Butyl
     4,4-difluoro-1-piperidinecarboxylate
                                           281652-11-7P, 4-Fluoro-1,2,3,6-
     tetrahydropyridine hydrochloride
                                       281652-25-3P, 4-(3-Bromo-4-
                             281652-26-4P 281652-27-5P
     fluorobenzyl) morpholine
                                                             281652-40-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (for preparation of quinolinecarboxamide derivs.)
     49713-42-0P, Ethyl 4-hydroxy-8-iodo-3-quinolinecarboxylate 58287-31-3P
IT
```

```
228725-37-9P
103318-52-1P
               188752-88-7P
                                              228725-72-2P
                                                             228725-85-7P
228726-33-8P
               228726-41-8P
                              228726-42-9P
                                              228726-59-8P
                                                             228726-66-7P
228726-92-9P
               228726-93-0P
                              228728-08-3P
                                              228728-23-2P, Ethyl
4-hydroxy-6-iodoguinoline-3-carboxylate 228728-41-4P
                                                         228728-42-5P
281651-90-9P
               281651-91-0P
                              281651-92-1P
                                              281651-93-2P
                                                             281651-94-3P
                              281651-98-7P
                                              281651-99-8P
                                                             281652-02-6P
281651-95-4P
               281651-97-6P
281652-03-7P
               281652-04-8P
                              281652-06-0P
                                              281652-07-1P
                                                             281652-08-2P
281652-09-3P
               281652-12-8P
                              281652-13-9P
                                              281652-14-0P
                                                             281652-15-1P
               281652-22-0P, 4-(4-Nitrobenzylidene)tetrahydro-2H-pyran
281652-21-9P
281652-23-1P
               281652-24-2P
                              281652-28-6P
                                              281652-29-7P
                                                             281652-30-0P
281652-31-1P
               281652-32-2P
                              281652-33-3P
                                              281652-34-4P
                                                             281652-35-5P
               281652-37-7P
                                              281652-39-9P
281652-36-6P
                              281652-38-8P
                                                             281652-41-3P
281652-42-4P
               281652-44-6P
                              281652-45-7P
                                              281652-46-8P
                                                             281652-47-9P
281652-48-0P
               281652-49-1P
                              281652-50-4P
                                              281652-51-5P
                                                             281652-52-6P
281652-53-7P
               281652-54-8P
                                              281652-56-0P
                                                             281652-57-1P
                              281652-55-9P
281652-59-3P
               281652-60-6P
                              281652-61-7P
                                              281652-62-8P
                                                             281652-63-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate, for preparation of quinolinecarboxamide derivs. as
   antiviral agents)
                              281652-18-4P
281652-16-2P
               281652-17-3P
                                              281652-19-5P
                                                             281652-20-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate, for preparation of quinolinethiocarboxamide derivs.
   as antiviral agents)
10341-26-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (preparation and hydride reduction to oxazepane)
2896-98-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (preparation and hydride reduction to thiazepane)
281650-73-5P
               281650-90-6P
                              281650-91-7P
                                              281650-93-9P
                                                             281650-96-2P
               281651-04-5P
                              281651-07-8P
                                              281651-22-7P
                                                             281651-25-0P
281650-97-3P
               281651-31-8P
                               281651-38-5P
281651-26-1P
                                              281651-40-9P
                                                              281651-41-0P
281651-48-7P
               281651-65-8P
                              281651-70-5P
                                              281651-76-1P
                                                             281651-82-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT
(Reactant or reagent); USES (Uses)
   (preparation of quinolinecarboxamides as antiviral agents, especially
   against herpes virus)
281650-66-6P
               281650-67-7P
                               281650-68-8P
                                              281650-69-9P
                                                              281650-70-2P
281650-71-3P
               281650-72-4P
                               281650-74-6P
                                              281650-75-7P
                                                              281650-76-8P
281650-77-9P
               281650-78-0P
                               281650-79-1P
                                              281650-80-4P
                                                              281650-81-5P
281650-82-6P
               281650-83-7P
                               281650-84-8P
                                              281650-85-9P
                                                              281650-86-0P
281650-87-1P
               281650-88-2P
                               281650-89-3P
                                              281650-92-8P
                                                              281650-94-0P
281650-95-1P
               281650-98-4P
                               281650-99-5P
                                              281651-01-2P
                                                              281651-02-3P
281651-08-9P
               281651-09-0P
                               281651-10-3P
                                              281651-11-4P
                                                              281651-12-5P
281651-13-6P
               281651-14-7P
                               281651-15-8P
                                              281651-16-9P
                                                              281651-17-0P
281651-18-1P
               281651-19-2P
                               281651-20-5P
                                              281651-21-6P
                                                              281651-23-8P
                               281651-28-3P
281651-24-9P
               281651-27-2P
                                              281651-29-4P
                                                              281651-30-7P
281651-32-9P
               281651-33-0P
                               281651-34-1P
                                              281651-35-2P
                                                              281651-36-3P
281651-37-4P
               281651-39-6P
                               281651-42-1P
                                              281651-43-2P
                                                              281651-44-3P
281651-45-4P
               281651-46-5P
                               281651-47-6P
                                              281651-49-8P
                                                              281651-50-1P
281651-51-2P
               281651-52-3P
                               281651-53-4P
                                              281651-54-5P
                                                              281651-55-6P
281651-57-8P
               281651-58-9P
                               281651-59-0P
                                              281651-60-3P
                                                              281651-61-4P
281651-62-5P
               281651-63-6P
                               281651-64-7P
                                              281651-66-9P
                                                              281651-67-0P
                               281651-71-6P
281651-68-1P
               281651-69-2P
                                              281651-72-7P
                                                              281651-73-8P
```

IT

IT

ΙT

IT

ΙT

```
281651-77-2P
                                                  281651-78-3P
    281651-74-9P
                   281651-7.5-0P
                                                                 281651-79-4P
                                   281651-83-0P
    281651-80-7P
                    281651-81-8P
                                                  281651-84-1P
                                                                 281651-85-2P
    281651-86-3P
                    281651-87-4P
                                   281651-88-5P
                                                  281651-89-6P
                                                                 281652-43-5P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of quinolinecarboxamides as antiviral agents, especially
       against herpes virus)
IT
     281651-00-1P
                    281651-03-4P
                                   281651-05-6P
                                                  281651-06-7P
                                                                 281651-56-7P
     281652-64-0P
                    281652-65-1P
                                   281652-66-2P
                                                  281652-67-3P
                                                                 281652-68-4P
     281652-69-5P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
    study); PREP (Preparation); USES (Uses)
        (preparation of quinolinecarboxamides as antiviral agents, especially
        against herpes virus)
ΙT
     603-35-0, Triphenylphosphine, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (quaternization with nitrobenzyl bromide)
     78191-00-1, N-Methyl-N-methoxyacetamide
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction with bromofluorobenzylmorpholine)
REFERENCE COUNT:
                         8
                               THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 18 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                         1999:194129 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         130:237562
TITLE:
                         Preparation of pyrazole compounds and plant
                         disease control agent
                         Akiyama, Shigeaki; Niki, Toshio; Utsunomiya, Tomohisa;
INVENTOR(S):
                         Watanabe, Junichi; Nishioka, Masanori; Suzuki,
                         Hiroyuki; Hayasaka, Fumio; Yamagishi, Kazuhiro
PATENT ASSIGNEE(S):
                         Nissan Chemical Industries, Ltd., Japan
                         PCT Int. Appl., 95 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         Japanese
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                           APPLICATION NO. DATE
                                         WO 1998-JP3997 . 19980907 <--
                         A1
                                19990318
     WO 9912910
         W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,
             DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO,
             NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA,
             UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
             CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                         A 19990329
     AU 9889985
                                         AU 1998-89985
                                                                   19980907 <--
     EP 1020447
                          A1
                                20000719
                                          EP 1998-941740
                                                                   19980907 <--
         R: CH, DE, FR, GB, IT, LI
     TW 499295
                          В
                                20020821
                                            TW 1998-87115006
                                                                   19980909 <--
PRIORITY APPLN. INFO.:
                                            JP 1997-246529
                                                                A 19970911 <--
                                           JP 1998-138325
                                                               A 19980520 <--
                                            WO 1998-JP3997
                                                               W 19980907 <--
```

OTHER SOURCE(S): MARPAT 130:237562

ED Entered STN: 25 Mar 1999

```
10/574,993
AΒ
     Claimed are pyrazole compds. represented by general formula [I; wherein R is
     C1-4 alkyl; X1 is halogeno; X2 is H or halogeno; A is a direct bond,
      (un) substituted CH2, CH2CH2, CH:CH, etc.; B is N3, OH, NH2, C(R23):NR24,
     C(R23):NOR24, etc.; wherein R23 is H, C1-4 alkyl, etc.; and R24 is H, C1-6
     alkyl, C2-6 alkenyl, etc. ] or salts of the compds. and a plant disease
     control agent containing at least one of the compds. and salts as the active
     ingredient. The compds. are highly effective against plant diseases, e.g.
     fungi, and are safe for crops. Thus, Et 3-chloro-1-methylpyrazole-5-
     carboxylate was reduced by NaBH4 in MeOH under reflux for 1 h to give 3-
     chloro-1-methyl-5-hydroxymethylpyrazole which was acetylated by acetyl
     chloride in the presence of Et3N in THF at room temperature for 12 h to give I
      (R = Me, X1 = Cl, X2 = H, A-B = CH2OH) (II). II at 500 ppm spray completely
     prevented rice seedling from being infected with Pyricularia oryzae.
IC
     ICM C07D231-16
          C07D401-06; C07D403-06; A01N043-56; A01N043-34; A01N043-72
CC
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 5
ST
     pyrazole prepn plant disease control agent; fungicide
     plant pyrazole prepn
IT
     Fungicides
        (agrochem.; preparation of pyrazole compds. and plant
```

disease control agent)

```
IT
     221274-48-2P
                    221274-49-3P
                                    221274-50-6P
                                                    221274-51-7P
                                                                   221274-52-8P
     221274-53-9P
                    221274-54-0P
                                    221274-55-1P
                                                   221274-56-2P
                                                                   221274-57-3P
     221274-58-4P
                    221274-59-5P
                                    221274-60-8P
                                                    221274-61-9P
                                                                   221274-62-0P
                    221274-64-2P
                                    221274-65-3P
                                                    221274-67-5P
                                                                   221274-68-6P
     221274-63-1P
     221274-69-7P
                    221274-70-0P
                                    221274-71-1P
                                                    221274-72-2P
                                                                   221274-73-3P
     221274-74-4P
                    221274-76-6P
                                    221274-78-8P
                                                    221274-80-2P
                                                                   221274-83-5P
     221274-84-6P
                    221274-85-7P
                                    221274-86-8P
                                                    221274-87-9P
                                                                   221274-88-0P
     221274-89-1P
                    221274-90-4P
                                    221274-91-5P
                                                    221274-92-6P
                                                                   221274-94-8P
     221274-95-9P
                    221274-96-0P
                                    221274-97-1P
                                                   221274-98-2P
                                                                   221274-99-3P
     221275-00-9P
                    221275-01-0P
                                    221275-02-1P
                                                    221275-03-2P
                                                                   221275-04-3P
     221275-05-4P
                    221275-06-5P
                                    221275-07-6P
                                                    221275-08-7P
                                                                   221275-09-8P
     221275-10-1P
                    221275-11-2P
                                    221275-12-3P
                                                    221275-13-4P
                                                                   221275-14-5P
     221275-15-6P
                                                                   221275-19-0P
                     221275-16-7P
                                    221275-17-8P
                                                    221275-18-9P
     221275-20-3P
                    221275-21-4P
                                    221275-22-5P
                                                    221275-23-6P
                                                                   221275-24-7P
                                                                   221275-29-2P
     221275-25-8P
                    221275-26-9P
                                    221275-27-0P
                                                    221275-28-1P
     221275-30-5P
                    221275-31-6P
                                    221275-32-7P
                                                    221275-33-8P
                                                                   221275-34-9P
     221275-35-0P
                     221275-36-1P
                                    221275-37-2P
                                                    221275-39-4P
                                                                   221275-40-7P
     221275-41-8P
                     221275-42-9P
                                    221275-43-0P
                                                    221275-44-1P
                                                                   221275-45-2P
     221275-46-3P
                     221275-47-4P
                                    221275-48-5P
                                                    221275-49-6P
                                                                   221275-50-9P
     221275-51-0P
                     221275-52-1P
                                    221275-54-3P
                                                    221275-55-4P
                                                                   221275-56-5P
     221275-57-6P
                     221275-58-7P
                                    221275-59-8P
                                                    221275-60-1P
                                                                   221275-61-2P
     221275-62-3P
                     221275-63-4P
                                    221275-64-5P
                                                    221275-65-6P
                                                                   221275-66-7P
     221275-67-8P
                    221275-68-9P
                                    221275-69-0P
                                                    221275-70-3P
                                                                   221275-71-4P
     221275-73-6P
                     221275-75-8P
                                    221275-77-0P
                                                    221275-80-5P
                                                                   221275-81-6P
     221275-84-9P
                     221275-86-1P
                                    221275-88-3P
                                                    221275-90-7P
                                                                   221275-92-9P
     221275-94-1P
                     221275-96-3P
                                    221275-98-5P
                                                    221276-02-4P
                                                                   221276-04-6P
     221276-06-8P
                     221276-07-9P
                                    221276-08-0P
                                                    221276-09-1P
                                                                   221276-10-4P
                                    221276-13-7P
     221276-11-5P
                     221276-12-6P
                                                    221276-14-8P
     RL: AGR (Agricultural use); BAC (Biological activity or effector, except
```

adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrazole compds. and plant disease control agent)

IT 74-88-4, Methyl iodide, 62-53-3, Aniline, reactions 75-15-0, Carbon disulfide, reactions reactions 98-88-4, Benzoyl chloride 75-36-5, Acetyl chloride 103-71-9, Phenyl 407-25-0, Trifluoroacetic anhydride isocyanate, reactions 2136-75-6, Triphenylphosphoranylideneacetaldehyde

10/574,993 173841-07-1 O-Benzylhydroxylamine hydrochloride 221276-16-0 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of pyrazole compds. and plant disease control agent) 221276-15-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of pyrazole compds. and plant disease control agent) THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L119 ANSWER 19 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN 1999:113672 HCAPLUS Full-text ACCESSION NUMBER: DOCUMENT NUMBER: 130:182476 Preparation of heterocyclic compounds as TITLE: irreversible bicyclic inhibitors of tyrosine kinases Bridges, Alexander James INVENTOR(S): PATENT ASSIGNEE(S): Warner-Lambert Company, USA SOURCE: PCT Int. Appl., 131 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PA	PATENT NO.						KIND DATE				APPLICATION NO.						DATE			
W0	9906	 396			A1	-	 1999	0211		wo 1	998-	US15	 592		1	9980'	729 <	<		
	W: .	AL,	ΑU,	BA,	BB,	BG,	BR,	CA,	CN,	CZ,	EE,	GE,	HR,	HU,	ID,	IL,	IS,			
		JP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	SG,			
		SI,	SK,	SL,	TR,	TT,	UA,	US,	UZ,	VN,	YU,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,			
		RU,	ТJ,	TM																
	RW: GH, GM, KE				LS,	MW,	SD,	SZ,	ŪG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,	ES,			
		FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,			
		CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG						•			
AU	9886	659			Α		1999	0222		AU 1	998-	8665	9		1	9980	729 <	<		
US	6153	617			Α		2000	1128	US 1999-269647					19990325 <				<		
US							2003	0508	3 US 2002-272651						2	0021	017 <	<		
PRIORIT	PRIORITY APPLN. INFO.:								US 1997-54061P				P 1	9970	729 <	<				
					WO 1998-US15592			592	,	W 19980729 <										
							US 1	999-	2696	47		A3 1	9990	325 <	<					
						US 2000-656331					B1 20000906 <									
							100	1004		US 1	999-	2696	47		A3 1	9990	325 <	<		

OTHER SOURCE(S): MARPAT 130:182476

Entered STN: 19 Feb 1999 ED

The title compds., e.g. I [X = DEF, Y = SR4, etc.; or X = SR4, etc., and Y =AB DEF; D = O, etc.; E = CO, etc.; F = CR1(:C):C(R5)H, etc.; a proviso is given; R1 = H, halo, etc.; R5 = H, halo, perfluoroalkyl, etc.; Z = indoline moiety (generic structure given), etc.; R4 = H, alkyl, etc.], are prepared This invention also provides a method of treating cancer, restenosis, atherosclerosis, endometriosis, and psoriasis and a pharmaceutical composition that comprises a compound that is an irreversible inhibitor of tyrosine kinases. N-[4-(6-bromo-2,3-dihydroindol-1-yl)quinazolin-6-yl]acrylamide in vitro showed IC50 of 0.4 nM against epidermal growth factor receptor tyrosine kinase.

IC ICM C07D403-04

IT

ICS A61K031-505; C07D401-04; C07D413-14

28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference(s): 1

heterocycle prepn tyrosine kinase inhibitor; quinazoline

prepn tyrosine kinase inhibitor; antitumor heterocycle
prepn tyrosine kinase inhibitor

IT Artery, disease

(coronary, restenosis; preparation and
therapeutic effect of heterocyclic compds. as irreversible
bicyclic inhibitors of tyrosine kinases)

IT Uterus, disease

(endometriosis; preparation and therapeutic effect of heterocyclic compds. as irreversible bicyclic inhibitors of tyrosine kinases)

IT Antitumor agents

#### Atherosclerosis

**Psoriasis** 

(preparation and therapeutic effect of heterocyclic compds. as irreversible bicyclic inhibitors of tyrosine kinases) IT 220488-73-3P 220575-55-3P 220575-56-4P 220575-57-5P 220575-58-6P 220575-59-7P 220575-60-0P 220575-61-1P 220575-62-2P 220575-63-3P 220575-64-4P 220575-66-6P 220575-69-9P 220575-70-2P 220575-71-3P 220575-72-4P 220575-73-5P 220575-74-6P 220575-77-9P 220575-76-8P 220575-78-0P 220575-79-1P 220575-80-4P 220575-81-5P 220575-82-6P 220575-83-7P 220575-84-8P 220575-85-9P 220575-86-0P 220575-87-1P 220575-88-2P 220575-89-3P 220575-90-6P 220575-91-7P 220575-92-8P 220575-93-9P 220575-94-0P 220575-95-1P 220575-96-2P 220575-97-3P 220575-98-4P 220575-99-5P 220576-00-1P 220576-01-2P 220576-02-3P 220576-03-4P 220576-04-5P 220576-05-6P 220576-06-7P 220576-07-8P 220576-08-9P 220576-09-0P 220576-10-3P 220576-11-4P 220576-12-5P 220576-13-6P 220576-14-7P 220576-15-8P 220576-16-9P 220576-17-0P 220576-19-2P 220576-20-5P 220576-18-1P 220576-21-6P 220576-22-7P 220576-23-8P 220576-24-9P 220576-25-0P 220576-26-1P 220576-27-2P 220576-28-3P 220576-29-4P 220576-31-8P 220576-30-7P 220576-32-9P 220576-33-0P 220576-34-1P 220576-35-2P 220576-36-3P 220576-37-4P 220576-38-5P 220576-39-6P 220576-40-9P 220576-41-0P 220576-42-1P 220576-43-2P 220576-44-3P 220576-45-4P 220576-46-5P 220576-47-6P 220576-48-7P 220576-49-8P 220576-50-1P 220576-51-2P 220576-52-3P 220576-53-4P 220576-54-5P 220576-55-6P 220576-56-7P 220576-57-8P 220576-58-9P 220576-59-0P 220576-60-3P 220576-61-4P 220576-62-5P 220576-63-6P 220576-64-7P 220576-65-8P 220576-66-9P 220576-67-0P 220576-68-1P 220576-69-2P 220576-70-5P 220576-71-6P 220576-72-7P 220576-73-8P 220576-74-9P 220576-75-0P 220576-76-1P 220576-77-2P 220576-78-3P 220576-79-4P 220576-80-7P 220576-81-8P 220576-82-9P 220576-83-0P 220576-84-1P 220576-85-2P 220576-86-3P 220576-87-4P 220576-88-5P 220576-89-6P 220576-90-9P 220576-91-0P 220576-92-1P 220576-93-2P 220576-94-3P 220576-95-4P 220576-96-5P 220576-97-6P 220576-98-7P 220576-99-8P 220577-00-4P 220577-01-5P 220577-02-6P 220577-03-7P 220577-04-8P 220577-05-9P 220577-06-0P 220577-07-1P 220577-08-2P 220577-09-3P 220577-10-6P 220577-11-7P 220577-12-8P 220577-13-9P 220577-14-0P 220577-15-1P 220577-16-2P 220577-18-4P 220577-19-5P 220577-20-8P 220577-21-9P 220577-22-0P 220577-23-1P 220577-24-2P 220577-25-3P 220577-26-4P 220577-27-5P 220577-28-6P 220577-29-7P 220577-30-0P 220577-31-1P 220577-32-2P 220577-33-3P 220577-34-4P 220577-35-5P 220577-36-6P 220577-37-7P 220577-38-8P 220577-39-9P 220577-40-2P 220577-41-3P 220577-43-5P 220577-44-6P 220577-45-7P 220577-46-8P 220577-47-9P 220577-48-0P 220577-49-1P 220577-50-4P 220577-51-5P 220577-52-6P 220577-53-7P 220577-54-8P 220577-55-9P 220577-56-0P 220577-57-1P 220577-58-2P 220577-59-3P 220577-60-6P 220577-61-7P 220577-62-8P 220577-63-9P 220577-64-0P 220577-65-1P 220577-66-2P 220577-67-3P 220577-68-4P 220577-69-5P 220577-70-8P 220577-71-9P 220577-72-0P 220577-73-1P 220577-74-2P 220577-75-3P 220577-76-4P 220577-77-5P 220577-78-6P 220577-79-7P 220577-80-0P 220577-81-1P 220577-82-2P 220577-83-3P 220577-84-4P

```
220577-88-8P
                                                 220577-90-2P
                                                                 220577-92-4P
    220577-85-5P
                   220577-86-6P
                                  220577-98-0P
                   220577-96-8P
    220577-94-6P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
    BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of heterocyclic compds. as irreversible bicyclic
       inhibitors of tyrosine kinases)
                   220578-01-8P
                                  220578-02-9P
                                                 220578-03-0P
                                                                 220578-04-1P
IT
    220578-00-7P
     220578-05-2P
                   220578-06-3P
                                  220578-07-4P
                                                 220578-08-5P
                                                                 220578-09-6P
    220578-10-9P 220578-11-0P 220578-12-1P
                                                 220578-13-2P
                                                                 220578-14-3P
    220578-15-4P 220578-16-5P 220578-17-6P 220578-18-7P
                                                                 220578-19-8P
    220578-20-1P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of heterocyclic compds. as irreversible bicyclic
        inhibitors of tyrosine kinases)
IT
     80449-02-1, Tyrosine kinase
     RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL
     (Biological study)
        (preparation of heterocyclic compds. as irreversible bicyclic
        inhibitors of tyrosine kinases)
ΙT
     79-10-7, 2-Propenoic acid, reactions
                                          19815-16-8,
     4-Chloro-6-nitroquinazoline 63839-24-7, 6-Bromoindoline
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of heterocyclic compds. as irreversible bicyclic
        inhibitors of tyrosine kinases)
                    220578-22-3P
ΙT
     220578-21-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of heterocyclic compds. as irreversible bicyclic
        inhibitors of tyrosine kinases)
                               THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         10
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 20 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                     1999:113656 HCAPLUS Full-text
DOCUMENT NUMBER:
                         130:168387
                         Irreversible inhibitors of tyrosine kinases
TITLE:
                         Bridges, Alexander James
INVENTOR(S):
                         Warner-Lambert Company, USA
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 124 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                        KIND
                                DATE
                                           APPLICATION NO.
                                                                  DATE
                         ____
                                           _____
                                19990211
                                           WO 1998-US15784
                                                                   19980729 <--
     WO 9906378
                         A1
         W: AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IS,
             JP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG,
             SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD,
             RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,
             FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,
```

AU 1998-87607

US 1999-269545

19980729 <--

19990325 <--

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

19990222

20001003

Α

AU 9887607

US 6127374

```
US 6562818
                          В1
                                20030513
                                            US 2000-593031
                                                                   20000613 <--
PRIORITY APPLN. INFO.:
                                            US 1997-54060P
                                                                P 19970729 <--
                                            WO 1998-US15784
                                                                W 19980729 <--
                                            US 1999-269545
                                                                A3 19990325 <--
OTHER SOURCE(S):
                         MARPAT 130:168387
ED
     Entered STN: 19 Feb 1999
     Pyrimidine derivs. that are irreversible inhibitors of tyrosine kinases are
ΑB
     reported. Thus; PhCH2OH was treated with 4-FC6H4NO2 to give 4-PhCH2OC6H4NO2,
     which was reduced to the amine and used to aminate 4-chloro-6-nitroquinazoline
     hydrochloride. The resulting 6-nitro-4-(4-benzyloxyanilino)quinazoline
     hydrochloride was reduced to the amine and acylated to give N-[4-(4-
     benzyloxyanilino)quinazolin-6- yl]acrylamide (I). I had an IC50 for
     inhibition of epidermal growth factor receptor tyrosine kinase of 3.6 nM.
IC
     ICM C07D239-74
     ICS C07D239-88; C07D239-93; C07D239-94; C07D471-04; C07D487-04;
          C07D495-04; A61K031-505; C07D471-04; C07D239-00; C07D221-00;
          C07D487-04; C07D239-00; C07D239-00; C07D487-04; C07D239-00;
          C07D209-00; C07D495-04; C07D333-00; C07D239-00
CC
     28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 7
ST
     pyrimidine prepn tyrosine kinase inhibitor;
     quinazolinylacrylamide prepn tyrosine kinase inhibitor
IT
     220488-25-5P
                  220488-27-7P 220490-90-4P
                                                  220490-91-5P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of anilinoquinazolinylacrylamides and related compds.
        as tyrosine kinase inhibitors)
IT
     80449-02-1, Tyrosine kinase
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (preparation of anilinoquinazolinylacrylamides and related compds.
        as tyrosine kinase inhibitors)
     79-10-7, 2-Propenoic acid, reactions 100-51-6, Benzyl alcohol,
IT
                108-95-2, Phenol, reactions
                                               350-46-9.
     reactions
                              220488-24-4
     1-Fluoro-4-nitrobenzene
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of anilinoquinazolinylacrylamides and related compds.
        as tyrosine kinase inhibitors)
ΙT
                 139-59-3P, 4-Phenoxyaniline
                                               1145-76-2P
                                                            6373-46-2P,
                                       179247-04-2P
     4-Benzyloxyaniline
                         179247-03-1P
                                                        179247-07-5P
     179247-08-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of anilinoquinazolinylacrylamides and related compds.
        as tyrosine kinase inhibitors)
IT
     220488-28-8P
                    220488-29-9P
                                   220488-30-2P
                                                  220488-31-3P
                                                                 220488-32-4P
     220488-33-5P
                    220488-34-6P
                                   220488-35-7P
                                                  220488-36-8P
                                                                 220488-37-9P
                                                  220488-41-5P
     220488-38-0P
                    220488-39-1P
                                   220488-40-4P
                                                                 220488-42-6P
     220488-43-7P
                    220488-44-8P
                                   220488-45-9P
                                                  220488-46-0P
                                                                 220488-47-1P
                                                  220488-51-7P
     220488-48-2P
                    220488-49-3P
                                   220488-50-6P
                                                                 220488-52-8P
     220488-53-9P
                    220488-54-0P
                                   220488-55-1P
                                                  220488-56-2P
                                                                 220488-57-3P
                    220488-59-5P
                                   220488-60-8P
                                                  220488-61-9P
     220488-58-4P
                                                                 220488-62-0P
                                                  220488-66-4P
                                   220488-65-3P
                                                                 220488-67-5P
     220488-63-1P
                    220488-64-2P
                    220488-69-7P
     220488-68-6P
                                   220488-70-0P
                                                  220488-71-1P
                                                                 220488-72-2P
                    220488-74-4P
                                   220488-75-5P
                                                  220488-76-6P
                                                                 220488-77-7P
     220488-73-3P
     220488-78-8P
                    220488-79-9P
                                   220488-80-2P
                                                  220488-81-3P
                                                                 220488-82-4P
     220488-84-6P
                    220488-86-8P
                                   220488-87-9P
                                                  220488-89-1P
                                                                 220488-90-4P
     220488-91-5P
                    220488-92-6P
                                   220488-93-7P
                                                  220488-94-8P
                                                                 220488-95-9P
```

220488-98-2P

220488-99-3P

220489-00-9P

220488-96-0P

220488-97-1P

```
220489-03-2P
                                                             220489-05-4P
220489-01-0P
                                              220489-04-3P
               220489-02-1P
                                                             220489-11-2P
                              220489-09-8P
                                              220489-10-1P
220489-06-5P
               220489-08-7P
               220489-13-4P
                              220489-15-6P
                                              220489-16-7P
                                                             220489-19-0P
220489-12-3P
                                              220489-27-0P
                                                             220489-29-2P
220489-21-4P
               220489-23-6P
                              220489-25-8P
220489-31-6P
               220489-33-8P
                              220489-34-9P
                                              220489-35-0P
                                                             220489-36-1P
220489-37-2P
               220489-38-3P
                              220489-39-4P
                                              220489-40-7P
                                                             220489-42-9P
                                              220489-46-3P
                              220489-45-2P
                                                             220489-47-4P
220489-43-0P
               220489-44-1P
                                                             220489-52-1P
220489-48-5P
               220489-49-6P
                              220489-50-9P
                                              220489-51-0P
                                                             220489-57-6P
220489-53-2P
               220489-54-3P
                              220489-55-4P
                                              220489-56-5P
                                              220489-61-2P
                                                             220489-63-4P
220489-58-7P
               220489-59-8P
                              220489-60-1P
220489-65-6P
               220489-67-8P
                              220489-69-0P
                                              220489-72-5P
                                                             220489-75-8P
220489-78-1P
               220489-81-6P
                              220489-83-8P
                                              220489-84-9P
                                                             220489-85-0P
220489-86-1P
               220489-87-2P
                              220489-88-3P
                                              220489-89-4P
                                                             220489-90-7P
                                              220489-94-1P
                                                             220489-95-2P
220489-91-8P
               220489-92-9P
                              220489-93-0P
               220489-97-4P
                              220489-98-5P
                                              220489-99-6P
                                                             220490-00-6P
220489-96-3P
               220490-02-8P
220490-01-7P
                              220490-03-9P
                                              220490-04-0P
                                                             220490-05-1P
                                              220490-09-5P
                                                             220490-10-8P
220490-06-2P
               220490-07-3P
                              220490-08-4P
220490-11-9P
               220490-13-1P
                              220490-14-2P
                                              220490-15-3P
                                                             220490-16-4P
               220490-18-6P
                              220490-19-7P
                                              220490-20-0P
220490-17-5P
                                                             220490-21-1P
220490-22-2P
               220490-23-3P
                              220490-24-4P
                                              220490-25-5P
                                                             220490-26-6P
                                              220490-31-3P
                                                             220490-32-4P
220490-27-7P
               220490-28-8P
                              220490-30-2P
               220490-34-6P
                              220490-35-7P
                                              220490-36-8P
                                                             220490-37-9P
220490-33-5P
               220490-39-1P
                              220490-40-4P
                                              220490-41-5P
                                                             220490-42-6P
220490-38-0P
                              220490-46-0P
                                              220490-47-1P
                                                             220490-48-2P
220490-43-7P
               220490-44-8P
220490-49-3P - 220490-50-6P
                              220490-51-7P
                                              220490-52-8P
                                                             220490-53-9P
                                              220490-58-4P
220490-54-0P
               220490-55-1P
                              220490-56-2P
                                                             220490-59-5P
               220490-61-9P
                              220490-62-0P
                                              220490-63-1P
                                                             220490-65-3P
220490-60-8P
               220490-67-5P
                                              220490-69-7P
                                                             220490-70-0P
220490-66-4P
                              220490-68-6P
220490-72-2P
               220490-74-4P
                              220490-76-6P
                                              220490-78-8P
                                                             220490-79-9P
220490-80-2P
               220490-81-3P
                              220490-82-4P
                                              220490-83-5P
                                                             220490-84-6P
               220490-87-9P
                              220490-88-0P
                                              220490-89-1P
                                                             220491-03-2P
220490-86-8P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
study); PREP (Preparation); USES (Uses)
```

(preparation of anilinoquinazolinylacrylamides and related compds.

REFERENCE COUNT:

as tyrosine kinase inhibitors) THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS 9 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L119 ANSWER 21 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:621194 HCAPLUS Full-text DOCUMENT NUMBER: 129:260454 Process for preparing pyrazoles TITLE:

INVENTOR(S):

Newsome, Peter Wyatt

PATENT ASSIGNEE(S): SOURCE:

Rhone-Poulenc Agro, Fr. PCT Int. Appl., 26 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA:	PATENT NO.					KIND DATE				APPL	ICAT	ION I		DATE				
WO	9840	358			A1		1998	0917	1	WO 1	998-	EP12	26		1:	9980:	305 <-	_
	W: AL, AU, BA			BA,	BB,	BG,	BR,	CA,	CN,	CU,	CZ,	ΕE,	GE,	GW,	HU,	ID,	IL,	
		IS,	JP,	KP,	KR,	LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	
		SG,	SI,	SK,	SL,	TR,	TT,	UA,	US,	UZ,	VN,	YU,	AM,	ΑZ,	BY,	KG,	KZ,	
		MD,	RU,	ТJ,	TM													
	RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	ŪG,	ZW,	ΑT,	BE,	CH,	DE,	DK,	ES,	FI,	
		FR.	GB,	GR,	IE.	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF.	CG,	CI,	CM,	

```
GA, GN, ML, MR, NE, SN, TD, TG
     US 5907041
                                19990525
                                            US 1997-815848
                                                                    19970312 <--
                          Α
     ZA 9801875
                                                                    19980305 <--
                          Α
                                19980909
                                            ZA 1998-1875
     CA 2283507
                                19980917
                                             CA 1998-2283507
                                                                    19980305 <--
                          A1
     AU 9868270
                                            AU 1998-68270
                                                                    19980305 <--
                          Α
                                19980929
     AU 750836
                          B2
                                20020801
     EP 966444
                          A1
                                19991229
                                            EP 1998-913641
                                                                    19980305 <--
     EP 966444
                          В1
                                20020904
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
             SI, FI
     BR 9808854
                                20000725
                                            BR 1998-8854
                                                                    19980305 <--
                          Α
     HU 200002931
                          A2
                                20001228
                                            HU 2000-2931
                                                                    19980305 <--
     NZ 337766
                         . A
                                20010330
                                            NZ 1998-337766
                                                                    19980305 <--
     JP 2001514642
                          Т
                                20010911
                                             JP 1998-539172
                                                                    19980305 <--
     AT 223382
                                            AT 1998-913641
                          Т
                                20020915
                                                                    19980305 <--
     ES 2179476
                          Т3
                                20030116
                                            ES 1998-913641
                                                                    19980305 <--
     CN 1107672
                          В
                                20030507
                                            CN 1998-803283
                                                                    19980305 <--
     SK 284800
                          В6
                                20051103
                                            SK 1999-1231
                                                                    19980305 <--
     CZ 296302
                          В6
                                20060215
                                            CZ 1999-3197
                                                                    19980305 <--
     US 6090927
                          Α
                                20000718
                                            US 1999-249798
                                                                    19990216 <--
     MX 9908353
                                20000228
                                            MX 1999-8353
                                                                    19990910 <--
                          Α
     BG 103778
                          Α
                                20010531
                                            BG 1999-103778
                                                                    19991004 <--
     BG 64648
                          В1
                                20051031
     CN 1432569
                          Α
                                20030730
                                                                    20020925 <--
                                             CN 2002-143826
PRIORITY APPLN. INFO.:
                                             US 1997-815848
                                                                 A 19970312 <--
                                             WO 1998-EP1226
                                                                 W
                                                                    19980305 <--
OTHER SOURCE(S):
                         CASREACT 129:260454; MARPAT 129:260454
     Entered STN: 01 Oct 1998
ED
AB
     The title compds. [I; Ar = (un) substituted Ph, pyridyl; R3 = CN, CO2H, CHO,
     etc.; R4 = as R3 excluding CN and halo; R6 = NH2, OH, Me], useful as
     pesticides (no data), were prepared by reaction of ArN.tplbond.N+X-[X=a]
     compatible anion] with R3CH(R4)CH2R5 [R5 = CN, CO2R8, C(O)C1-6 alkyl; R8 = C1-
     6 alkyl, C1-6 haloalkyl] followed by rearrangement of the intermediate
     R3C(R4)(CH2R5)N:NAr.
     ICM C07D231-10
IC
     ICS C07D231-44; C07D231-38; C07C317-48; C07C317-44; C07C255-65
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     pyrazole prepn manufg
ST
     189338-31-6P
                    195372-79-3P
                                   213457-40-0P
IT
                                                  213457-41-1P
                                                                  213457-42-2P
     213457-43-3P
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
         (process for preparing pyrazoles)
IT
     213457-37-5P
                    213457-38-6P
                                   213457-39-7P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (process for preparing pyrazoles)
     590-17-0, Bromoacetonitrile
                                   1851-09-8, 4-Chlorophenylsulfonyl
TΨ
     acetonitrile
                    5000-48-6
                               24279-39-8, 2,6-Dichloro-4-
     trifluoromethylaniline
                             40497-11-8, Ethyl 2,3-dicyanopropionate
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (process for preparing pyrazoles)
                               THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         10
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
                      HCAPLUS COPYRIGHT 2007 ACS on STN
L119 ANSWER 22 OF 34
ACCESSION NUMBER:
                         1998:76286 HCAPLUS Full-text
DOCUMENT NUMBER:
                         128:128783
TITLE:
                         Polycarbonate compositions with less physical
```

deterioration and yellowing by ionizing

radiation at sterilization

INVENTOR(S): Miya, Shinya; Kanayama, Satoshi

PATENT ASSIGNEE(S): Mitsubishi Engineering Plastic K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10030055	Α	19980203	JP 1996-185816	19960716 <
PRIORITY APPLN. INFO.:			JP 1996-185816	19960716 <

OTHER SOURCE(S):

MARPAT 128:128783

ED Entered STN: 09 Feb 1998

Title compns., useful for <u>medical</u> goods, comprise (A) 100 parts polycarbonates, (B) 0.01-5 parts cinnamyl compds., and (C) 0.01-5 parts sulfides, sulfoxides, or sulfones. Thus, a composition containing Iupilon S 2000 100, cinnamyl acetate 0.5, and di-Ph sulfoxide 0.5 part, was mixed, pelletized, and injection-molded to give a test piece, which showed less yellowing at irradiation of 60Co  $\gamma$ -ray.

IC ICM C08L069-00

ICS C08K005-04; C08K005-37; C08K005-41; C08K005-42

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 63

yellowing discoloration prevention polycarbonate blend; phys deterioration prevention polycarbonate blend; cinnamyl compd polycarbonate blend; sulfide polycarbonate blend <a href="mailto:medical">medical</a> goods; sulfoxide polycarbonate blend sterilization <a href="mailto:model">ionization</a> <a href="mailto:mail

; sulfone polycarbonate blend yellowing prevention

IT Gamma ray sterilization

Medical goods

Yellowing prevention

Yellowing prevention

(polycarbonate compns. with less phys. deterioration and yellowing by  $\underline{\text{ionizing }}$   $\underline{\text{radiation}}$  at sterilization for

medical goods)

IT Sulfides, properties

Sulfones

Sulfoxides

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polycarbonate compns. with less phys. deterioration and yellowing by  $\underline{\text{ionizing }}$   $\underline{\text{radiation}}$  at sterilization for

medical goods)
IT Polycarbonates, prope

Polycarbonates, properties

RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polycarbonate compns. with less phys. deterioration and yellowing by ionizing radiation at sterilization for medical goods)

IT 103-41-3, Benzyl cinnamate 103-54-8, Cinnamyl acetate 104-54-1, Cinnamyl alcohol 127-63-9, Diphenyl sulfone 538-74-9, Dibenzyl sulfide 877-94-1, Cinnamyl methyl ketone 945-51-7, Diphenyl sulfoxide 2550-40-5, Dicyclohexyl disulfide

RL: MOA (Modifier or additive use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polycarbonate compns. with less phys. deterioration and yellowing by ionizing radiation at sterilization for

#### medical goods)

IT 24936-68-3, Iupilon S 2000, properties 25037-45-0

RL: POF (Polymer in formulation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polycarbonate compns. with less phys. deterioration and yellowing by ionizing radiation at sterilization for medical goods)

L119 ANSWER 23 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1998:51521 HCAPLUS Full-text

DOCUMENT NUMBER:

128:75297

TITLE:

Indole compounds and their use in treating

diseases of the central nervous system

INVENTOR(S):

Lundbech, Jane Marie; Kanstrup, Anders

PATENT ASSIGNEE(S):

Novo Nordisk A/S, Den.

SOURCE:

U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 509,471.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 5696148	Α	19971209	US 1996-749520		19961118 <
US 5536721	Α	19960716	US 1995-403357	٠	19950314 <
us 5783575	Α	19980721	US 1995-509471		19950731 <
PRIORITY APPLN. INFO.:			DK 1994-295	Α	19940314 <
			US 1995-403357	A2	19950314 <
			DK 1995-870	Α	19950731 <
			US 1995-509471	A2	19950731 <

OTHER SOURCE(S): MARPAT 128:75297

Entered STN: 29 Jan 1998

Indole compds. I (R1 = alkyl, haloalkyl, alkenyl, cycloalkyl, etc.; R2 = halo, AB cycloalkylalkyl, cycloalkyl, alkenyl, alkynyl, benzyl, etc.; R3, R4 = H, CN, acyl, carbalkoxy, alkylsulfonyl, etc.; R5 = H, alkyl; R6-9 = H, nitro, amino, halo, trifluoromethyl, etc.) were prepared for treating diseases of the central nervous system related to the metabotropic glutamate receptor system. Thus, Et 2-cyano-3-(1-benzyl-2- chloro-3-indolyl)acrylate was prepared by condensation of 1-benzyl-2-chloro-3-indolecarboxaldehyde in EtOH containing The product showed IC50 of 2.2  $\mu$ M against PI-hydrolysis in BHK 570 cells expressing mGluR1a receptors.

A61K031-40; C07D209-22; C07D209-24; C07D209-30

INCL 514419000

27-11 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 63

indoleacrylate prepn treatment central nervous system ST

Nervous system IT

> (Huntington's chorea; preparation of indole compds. for treating central nervous system diseases)

IT Nervous system

> (central, disease; preparation of indole compds. for treating central nervous system diseases)

IT Brain, disease

> (ischemia; preparation of indole compds. for treating central nervous system diseases)

IT Glutamate receptors

> RL: BSU (Biological study, unclassified); BIOL (Biological study) (metabotropic; preparation of indole compds. for treating central nervous system diseases)

```
IT
     Epilepsy
     Parkinson's disease
        (preparation of indole compds. for treating central nervous system
        diseases)
IΤ
    Mental disorder
        (senile psychosis; preparation of indole compds. for treating
        central nervous system diseases)
IT
     188034-08-4P
                    188034-09-5P
                                   188034-10-8P
                                                  188034-11-9P
                                                                 188034-12-0P
     188034-13-1P
                    188034-15-3P
                                   188034-16-4P
                                                  188034-17-5P
                                                                 188034-18-6P
     188034-19-7P
                    188034-20-0P
                                   188034-21-1P
                                                  188034-22-2P
                                                                 188034-23-3P
     188034-28-8P
                    188034-29-9P
                                   188034-30-2P
                                                  188034-31-3P
                                                                 188034-32-4P
                                   188034-36-8P
                                                  188034-37-9P
     188034-34-6P
                    188034-35-7P
                                                                 188034-38-0P
     188034-39-1P
                    200641-26-5P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of indole compds. for treating central nervous system
        diseases)
IT
     74-93-1, Methyl mercaptan, reactions
                                           105-53-3, Diethyl
                105-56-6 2274-42-2, Methylsulfonylacetonitrile
                                                                   24279-74-1
     75621-49-7
                75621-50-0 75621-51-1 77655-46-0 77655-47-1
     77655-86-8, 1H-Indole-3-carboxaldehyde, 2-chloro-1-(cyclopropylmethyl)-
     120069-21-8
                 188034-40-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of indole compds. for treating central nervous system
IT
     188034-14-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of indole compds. for treating central nervous system
        diseases)
REFERENCE COUNT:
                         12
                               THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L119 ANSWER 24 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:
                         1998:28734 HCAPLUS Full-text
DOCUMENT NUMBER:
                         128:75394
TITLE:
                         Preparation of 3-aryl-5-haloalkylpyrazoles
INVENTOR(S):
                         Hamper, Bruce C.; Mao, Michael K.
PATENT ASSIGNEE(S):
                         Monsanto Co., USA
SOURCE:
                         PCT Int. Appl., 131 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
                         9
PATENT INFORMATION:
```

PA'	PATENT NO.				KIND DATE				APPLICATION NO.						DATE				
	9748 9748				A2 A3		19971224 19980402		1	WO 1	997-1	JS10	525		1:	9970	 616 <	(	
	W: RW:	DK, LC, PT, GH,	EE, LK, RO, KE,	ĘS, LR, RU, LS,	FI, LS, SD, MW,	GB, LT, SE, SD,	GE, LU, SG, SZ,	GH, LV, SI, UG,	HU, MD, SK, ZW,	AT,	IS, MK, TM, BE,	JP, MN, TR, CH,	KE, MW, TT, DE,	KG, MX, UA, DK,	KP, NO, UG, ES,	KR, NZ, UZ, FI,	KZ, PL, VN, FR,	YU	
	1778 1778	GN, 59		MR,	NE, A1	SN,		TG 0222		SE, IN 1 IN 1	993-1	MA77	8	CG,	1	9931:	GA, 103 <		

```
19990417
                                           IN 1996-MA62
                                                                  19960112 <--
    IN 182467
                         A1
                                                                  19960620 <--
                                           US 1996-667103
    US 5698708 ·
                         Α
                               19971216
                                                                  19960620 <--
                               19990209
                                           US 1996-667135
    US 5869688
                        Α
                               19990309
                                          US 1996-667256
                                                                  19960620 <--
    US 5880290
                        Α
                                           AU 1997-34919
                                                                  19970616 <--
    AU 9734919
                        Α
                               19980107
                               20000615
    AU 720882
                        В2
                         A2
                               19990623 EP 1997-931231
    EP 923520
                                                                  19970616 <--
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, FI
                                           BR 1997-10711
                               19990817
                                                                  19970616 <--
     BR 9710711
                         Α
                                           NZ 1997-333414
                                                                  19970616 <--
                               20000526
    NZ 333414
                         Α
                                           JP 1998-503274
                                                                  19970616 <--
     JP 2000512656
                        T
                               20000926
                        A2
                                           HU 2001-4324
                                                                  19970616 <--
    HU 200104324
                               20020228
                         A3
    HU 200104324
                               20020429
PRIORITY APPLN. INFO.:
                                           US 1996-667103
                                                              A 19960620 <--
                                                              A 19960620 <--
                                           US 1996-667135
                                           US 1996-667256
                                                              A 19960620 <--
                                           IN 1992-MA173
                                                              A1 19920318 <--
                                           IN 1993-MA784
                                                              A1 19931103 <--
                                           US 1994-189337
                                                              A2 19940131 <--
                                           US 1994-277726
                                                              B3 19940720 <--
                                           US 1995-407352
                                                              A2 19950320 <--
                                           WO 1997-US10525
                                                              W 19970616 <--
                        CASREACT 128:75394; MARPAT 128:75394
OTHER SOURCE(S):
     Entered STN: 17 Jan 1998
     Title compds. (I; R1,R10 = alkyl; R2 = haloalkyl; R3,R5,R6 = halo) were
AΒ
     prepared Thus, 4-chloro-2-fluoro-5-methylacetophenone was condensed with
     ClCOCF3 and the product cyclocondensed with MeNHNH2 to give, after oxidation,
     bromination, and esterification steps, I (R1 = Me, R2 = CF3, R3 = Br, R5 = F,
     R6 = C1, R10 = CHMe2).
     ICM C07C045-45
IC
     ICS C07D231-16
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     arylhaloalkylpyrazole prepn
ST
                                                                177211-21-1P
     142623-48-1P 142623-56-1P
                                  142623-96-9P 174514-08-0P
IT
     177489-17-7P
     RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
     preparation); PREP (Preparation); RACT (Reactant or reagent)
        (preparation of 3-aryl-5-haloalkylpyrazoles)
     174514-07-9P
ΙT
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (preparation of 3-aryl-5-haloalkylpyrazoles)
     67-63-0, Isopropanol, reactions 4447-60-3, Triisopropyl
IT
                   142623-87-8 177211-26-6, 1-(4-Chloro-2-fluoro-5-
     orthoformate
     methylphenyl)ethanone
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of 3-aryl-5-haloalkylpyrazoles)
L119 ANSWER 25 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                         1997:696745 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         128:3695
                         Preparation of N-quinazolinylacrylamides and
TITLE:
                         analogs as tyrosine kinase inhibitors
                         Bridges, Alexander James; Denny, William Alexander;
INVENTOR(S):
                         Dobrusin, Ellen Myra; Doherty, Annette Marian; Fry,
                         David W.; Mcnamara, Dennis Joseph; Showalter, Howard
                         Daniel Hollis; Smaill, Jeffrey B.; Zhou, Hairong; et
                         al.
                        Warner-Lambert Company, USA; Bridges, Alexander James;
PATENT ASSIGNEE(S):
```

Denny, William Alexander; Dobrusin, Ellen Myra; Doherty, Annette Marian; Fry, David W.; Mcnamara, Dennis Joseph; Showalter, Howard Daniel Hollis; Smaill, Jeffrey B.; Zhou, Hairong

PCT Int. Appl., 193 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

um. 1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT 1	10.			KIND DATE			APPLICATION NO.						DATE				
WO	KR, LC, L SK, TR, T				A1 BB, LR, UA,	BB, BG, BR, CA, LR, LT, LV, MG, I UA, US, UZ, VN, MW, SD, SZ, UG,				CZ, MN, AM,	MX, AZ,	GE, NO, BY,	GH, NZ, KG,	PL, KZ,	IL, RO, MD,	RO, SG, SI, MD, RU, TJ, TM		
	RW:	GR,	IE,	IT,	-	MC,	NL,	-	-			-	-				-	
	2249 9724	446	,	112,	A1 A		1997 1997				L997-:					9970 9970		
AU	72553 8927	33			B2 A1		2000 1999	1012			1997-					•		
	8927	89	D.F.	GII.	В1	DИ	2002	0227										
	R:	IE,	SI,	LT,	LV,						, IT,			ΝL,				
CN	1218 1145	614			A B		1999 2004				1997-					9970		
	99013 9708				A2 A		1999 1999			BR :	1999- 1997-	8640				9970 9970		
	2000 3370		57		T B2		2000 2003			JP í	1997-	5371	73		. 1	9970	408	<
	2137 8927				T T		2002 2002				1997- 1997-					9970 9970		
	2174: 1495				ТЗ А		2002 2004				1997- 2003-					9970 9970		
SK	2840 2954	73			В6 В6		2004 2005	0908		SK :	1998- 1998-	1417				9970 9970		
PL	1904	89			В1		2005	1230		PL :	1997-	3293	91		1	9970	408	<
ZA	1923 9703	060			A A		2007 1997	1104		ZA :	2006- 1997-	3060			1	.9970 .9970	410	<
NO	6316 9804	718			. B1		2001 1998	1209			1998- 1998-					.9981 .9981		
KR	3125 2000	0053	64		B1 A		2002 2000	0125			1998-					9981		
	6344 1019				B1 A1		2002 2005				1999- 1999-					.9990 .9991		
	6602 2003		51	•	B1 A1		2003 2003				2000- 2003-					:0000 :0030		
PRIORIT	PRIORITY APPLN. INFO.:								CN 2	1996- 2003- 1997-	1011	4126		A3. 1	.9960 .9970 .9970	408	<	
											1999- 2000-					9990		

OTHER SOURCE(S): MARPAT 128:3695

ED Entered STN: 05 Nov 1997

AB Title compds. [I; R = (CHR6)pR9; R1R2 = CH:CR7CR8:CH, CH:CR7CR8:N, CH:CR7N:CH, etc.; R6 = H or alkyl; 1 of R7,R8 = Z1Z2R10 and the other = OR4, SR4, NHR3; R3,R4 = (un)substituted alkyl, heterocyclylalkyl, etc.; R9 = (un)substituted

10/574,993 Ph; R10 = CR11:CHR5, C.tplbond.CR5, CR11:C:CHR5; R5 = H, halo, alkyl, Ph, etc.; R11 = H, halo, alkyl; Z1 = bond, O, (alkyl)imino, CH2, etc.; Z2 = CO, SO, P(O)(OH), etc.; p = 0 or 1] were prepared Thus, I (R = C6H4Br-3, R1R2 = CH:NCR8:CH, R8 = F) was condensed with 3-morpholinoprpanamine and the product acylated by CH2:CHCOC1 to give title compound II. Data for biol. activity of I were given. ICM C07D239-94 ICS C07D487-04; C07D471-04; C07D495-04 28-16 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1 quinazolinylacrylamide prepn tyrosine kinase inhibitor Growth factor receptors

ST

IT

RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study)

(mediated disorders; treatment; preparation of

N-quinazolinylacrylamides and analogs as tyrosine kinase inhibitors)

IT Antitumor agents

IC

CC

IT

(preparation of N-quinazolinylacrylamides and analogs as tyrosine kinase inhibitors)

```
194423-07-9P
               194423-11-5P
                               194423-13-7P
                                              194423-15-9P
                                                              198959-82-9P
198959-83-0P
               198959-84-1P
                               198959-86-3P
                                              198959-87-4P
                                                              198959-88-5P
198959-89-6P
                                              198959-93-2P
               198959-91-0P
                               198959-92-1P
                                                              198959-94-3P
                               198959-97-6P
198959-95-4P
               198959-96-5P
                                              198959-98-7P
                                                              198959-99-8P
198960-00-8P
               198960-01-9P
                               198960-02-0P
                                              198960-04-2P
                                                              198960-05-3P
               198960-07-5P
198960-06-4P
                               198960-08-6P
                                              198960-09-7P
                                                              198960-10-0P
198960-11-1P
               198960-12-2P
                               198960-13-3P
                                              198960-14-4P
                                                              198960-15-5P
198960-16-6P
               198960-17-7P
                               198960-18-8P
                                              198960-19-9P
                                                               198960-20-2P
198960-21-3P
               198960-22-4P
                               198960-23-5P
                                              198960-24-6P
                                                              198960-25-7P
198960-26-8P
               198960-27-9P
                               198960-28-0P
                                              198960-29-1P
                                                              198960-30-4P
198960-32-6P
               198960-34-8P
                               198960-35-9P
                                              198960-36-0P
                                                              198960-37-1P
198960-38-2P
               198960-39-3P
                               198960-40-6P
                                              198960-41-7P
                                                              198960-42-8P
198960-43-9P
               198960-44-0P
                               198960-45-1P
                                              198960-46-2P
                                                              198960-47-3P
198960-49-5P
               198960-51-9P
                               198960-52-0P
                                              198960-53-1P
                                                              198960-54-2P
198960-55-3P
               198960-56-4P
                               198960-57-5P
                                              198960-58-6P
                                                              198960-59-7P
                               198960-62-2P
                                              198960-63-3P
198960-60-0P
               198960-61-1P
                                                              198960-64-4P
198960-65-5P
               198960-66-6P
                               198960-67-7P
                                              198960-68-8P
                                                              198960-69-9P
198960-70-2P
               198960-71-3P
                               198960-7,2-4P
                                              198960-73-5P
                                                              198960-74-6P
198960-75-7P
               198960-76-8P
                               198960-77-9P
                                              198960-78-0P
                                                              198960-79-1P
               198960-81-5P
198960-80-4P
                               198960-82-6P
                                               198960-83-7P
                                                              198960-84-8P
198960-85-9P
               198960-86-0P
                               198960-87-1P
                                              198960-88-2P
                                                              198960-89-3P
198960-90-6P
               198960-91-7P
                               198960-92-8P
                                               198960-93-9P
                                                              198960-94-0P
198960-95-1P
               198960-96-2P
                               198960-97-3P
                                               198960-98-4P
                                                              198960-99-5P
                                                              198961-04-5P
198961-00-1P
               198961-01-2P
                               198961-02-3P
                                              198961-03-4P
198961-06-7P
               198961-08-9P
                               198961-09-0P
                                              198961-11-4P
                                                              198961-13-6P
198961-15-8P
               198961-16-9P
                               198961-17-0P
                                              198961-18-1P
                                                              198961-19-2P
198961-20-5P
               198961-21-6P
                               198961-22-7P
                                              198961-23-8P
                                                              198961-24-9P
198961-25-0P
               198961-26-1P
                               198961-27-2P
                                              198961-28-3P
                                                              198961-29-4P
198961-30-7P
               198961-31-8P
                               198961-33-0P
                                              198961-34-1P
                                                              198961-35-2P
198961-36-3P
               198961-37-4P
                               198961-38-5P
                                              198961-39-6P
                                                              198961-40-9P
                                              198961-44-3P
198961-41-0P
               198961-42-1P
                               198961-43-2P
                                                              198961-45-4P
198961-46-5P
               198961-47-6P
                               198961-48-7P
                                              198961-50-1P
                                                              198961-52-3P
198961-54-5P
               198961-55-6P
                               198961-56-7P
                                               198961-57-8P
                                                              198961-58-9P
198961-59-0P
               198961-60-3P
                               198961-61-4P
                                              198961-62-5P
                                                              198961-63-6P
198961-64-7P
               198961-65-8P
                               198961-66-9P
                                               198961-67-0P
                                                              198961-68-1P
198961-69-2P
               198961-70-5P
                               198961-71-6P
                                               198961-72-7P
                                                              198961-73-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
```

(preparation of N-quinazolinylacrylamides and analogs as tyrosine kinase inhibitors)

BIOL (Biological study); PREP (Preparation); USES (Uses)

IT

SOURCE:

80449-02-1, Tyrosine kinase

```
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (preparation of N-quinazolinylacrylamides and analogs as tyrosine
        kinase inhibitors)
IT
     198961-98-7P
     RL: BYP (Byproduct); PREP (Preparation)
        (preparation of N-quinazolinylacrylamides and analogs as tyrosine
        kinase inhibitors)
                                 79-10-7, 2-Propenoic acid, reactions
ΙT
     79-03-8, Propanoyl chloride
                        108-31-6, 2,5-Furandione, reactions
     79-41-4, reactions
     108-44-1, m-Toluidine, reactions
                                      110-91-8, Morpholine,
                 123-00-2, 3-(4-Morpholinyl) propanamine
                                                          140-10-3,
     reactions
     trans-Cinnamic acid, reactions
                                     471-25-0, Propiolic acid
     590-93-2, 2-Butynoic acid
                                591-19-5, 3-Bromoaniline
                                                            625-35-4,
     trans-Crotonyl chloride
                               627-63-4
                                          814-68-6, Acryloyl chloride
     920-46-7, Methacryloyl chloride
                                       1427-07-2, 2-Fluoro-4-nitrotoluene
     1609-93-4, cis-3-Chloroacrylic acid 2345-51-9, 3-Butynoic acid
     2393-23-9, 4-Methoxybenzylamine 2459-05-4, Monoethyl fumarate
     2833-28-5
                3970-35-2, 2-Chloro-3-nitrobenzoic acid 4441-30-9,
     3-(4-Morpholinyl)-1-propanol 5317-33-9, 3-(4-Methyl-1-piperazinyl)-1-
                6943-17-5, 6-Nitro-4-quinazolone 10487-71-5, Crotonoyl
     chloride
                13330-96-6, 4-Dimethylamino-1-butanol
                                                        21651-12-7,
     trans-2,4-Pentadienoic acid
                                  51390-23-9, 3-(1-Imidazolyl)-1-propanol
                                                   153436-69-2
     71027-02-6, 4,4,4-Trifluoro-2-butenoic acid
                                                                 153436-70-5
     162012-69-3, 4(1H)-Quinazolinone, 7-fluoro-6-nitro-
                                                           169205-78-1
                                 171178-44-2, 6-Fluoropyrido[3,4-d]pyrimidin-
                   171178-26-0
     169205-81-6
                                             171179-43-4
                 171179-02-5
                               171179-06-9
                                                           171744-81-3
     4(3H)-one
                   175357-98-9
                                 198961-95-4
                                               198961-96-5
                                                             198961-97-6
     174709-17-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of N-quinazolinylacrylamides and analogs as tyrosine
        kinase inhibitors)
     350-32-3P, 2-Fluoro-4-nitrobenzamide 403-24-7P, 2-Fluoro-4-nitrobenzoic
TT
                                                        34667-88-4P,
            34662-24-3P, 2-Chloro-3-nitrobenzonitrile
     2-Fluoro-4-nitrobenzonitrile 35212-90-9P, Methyl 3-amino-6-
                                         76878-02-9P
     nitrobenzothiophene-2-carboxylate
                                                       76878-17-6P
     117054-76-9P, 2-Chloro-3-nitrobenzamide
                                               162012-66-0P
                                                              171179-03-6P
     175357-96-7P
                    175357-97-8P
                                   198204-59-0P
                                                  198961-74-9P
                                                                 198961-75-0P
     198961-76-1P
                    198961-77-2P, 6-Amino-4-dimethylaminoquinazoline
                                   198961-80-7P
                                                  198961-81-8P
     198961-78-3P
                    198961-79-4P
                                                                 198961-82-9P
                                   198961-85-2P
                                                                 198961-87-4P
     198961-83-0P
                    198961-84-1P
                                                  198961-86-3P
                                                  198961-91-0P
                                   198961-90-9P
                                                                 198961-92-1P
     198961-88-5P
                    198961-89-6P
     198961-93-2P
                    198961-94-3P
                                   198962-01-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of N-quinazolinylacrylamides and analogs as tyrosine
        kinase inhibitors)
IT
     198961-99-8P
                    198962-00-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of N-quinazolinylacrylamides and analogs as tyrosine
        kinase inhibitors)
L119 ANSWER 26 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                         1997:350496 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         127:18472
                         Polycarbonate resin compositions resistant to
TITLE:
                         discoloration by ionizing radiation
                         Miya, Shinya; Kanayama, Satoshi
INVENTOR(S):
PATENT ASSIGNEE(S):
                         Mitsubishi Engineering Plastic K. K., Japan
```

Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

LANGUAGE:

Patent Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09087507 PRIORITY APPLN. INFO.:	A	19970331	JP 1995-247676 JP 1995-247676	19950926 < 19950926 <

OTHER SOURCE(S):

MARPAT 127:18472

ED Entered STN: 04 Jun 1997

- AB The title compns. contain polycarbonates 100, aromatic hydrocarbon-aldehyde resins 0.01-5, and sulfoxides or sulfones 0.01-5 parts. Thus, a test piece containing Iupilon S 2000 100, Nikanol Y 50 0.25, and di-Ph sulfoxide 0.5 part showed low yellowing by γ ray.
- IC ICM C08L069-00

ICS C08K005-41; C08L069-00; C08L061-06

- CC 37-6 (Plastics Manufacture and Processing)
- ST <u>radiation</u> yellowing resistant polycarbonate; aldehyde resin sulfone polycarbonate molding; gamma <u>radiation</u> yellowing resistant polycarbonate
- IT Gamma ray

Yellowing prevention

(polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins

and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

IT Sulfones

Sulfoxides

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins

and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

IT Aromatic hydrocarbons, properties

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(polymers with aldehydes; polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

IT Aldehydes, properties

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses)

(polymers with aromatic hydrocarobons; polycarbonate resin compns. containing

aromatic hydrocarbon-aldehyde resins and sulfoxides and sulfones resistant to discoloration by  $\underline{ionizing\ radiation}$ )

IT 24936-68-3, Iupilon S 2000, properties

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (Iupilon S 2000; polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

IT 26139-75-3

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (Nikanol Y 50; polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

IT 107-61-9, 1,4-Thioxane-1,1-dioxide 621-08-9, Dibenzyl sulfoxide

945-51-7, Diphenyl sulfoxide 151183-90-3, Nikanol DS

RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde

resins

and sulfoxides and sulfones resistant to discoloration by ionizing radiation

IT 25037-45-0

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses) (polycarbonate resin compns. containing aromatic hydrocarbon-aldehyde resins

and sulfoxides and sulfones resistant to discoloration by ionizing radiation)

L119 ANSWER 27 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1997:224107 HCAPLUS Full-text

DOCUMENT NUMBER:

126:212041

TITLE:

Preparation of indolyl compounds for

treatment of diseases in the central nervous

system related to the metabotropic glutamate receptor

system

INVENTOR(S):

Lundbeck, Jane Marie; Kanstrup, Anders

PATENT ASSIGNEE(S):

Novo Nordisk A/s, Den.; Lundbeck, Jane Marie;

Kanstrup, Anders

SOURCE:

PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA		KIND DATE				APPLICATION NO.						DATE							
						-													
WO	9705	109			A1 19970213			0213	1	WO 1	996-1	DK33	2		1	9960	731	<	
	W:	AL,	AM,	AT,	AU,	AZ,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CU,	CZ,	DE,	DK,		
		EE,	ES,	FI,	GB,	GE,	HU,	IL,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LK,	LR,		
		LS,	LT,	LU,	LV,	MD,	MG,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE	
	RW:	KE,	LS,	MW,	SD,	SZ,	UG,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,		
		ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	CF,	CG,	CI,	CM						
AU	9665	142			Α		1997	0226		AU 1	996-	6514	2		1:	9960	731	<	
EP	8436	60			<b>A</b> 1		1998	0527		EP 1	996-	9248	01		1:	9960'	731	<	
	R:	AT,	BE,	ĊH,	DE,	DK,	ES,	FR,	ĠB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FI	
JP	1150	9847			T		1999	0831		JP 1	996-	5071	24		1	9960	731	<	
PRIORIT	PRIORITY APPLN. INFO.:					,			DK 1995-870			A 19950731 <							
						1	WO 1	996-1	DK33:	2	Ţ	W 1	9960'	731	<				

OTHER SOURCE(S): MARPAT 126:212041

ED Entered STN: 07 Apr 1997

AB The title compds. [I; R1 = C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, etc.; R2 = halo, C1-6 alkyl, PhCH2, etc.; R3, R4 = H, CN, COOPh, etc.; R5 = H, C1-6 alkyl; R6-R9 = H, NO2, NH2, etc.], useful in treating epilepsy, senile dementia, Parkinson's <u>disease</u>, Huntington's Chorea, pain or deficiency of mental and motoric performance seen after <u>conditions</u> of <u>brain</u> ischemia, were <u>prepared</u> and formulated. Thus, <u>reaction</u> of 1-benzyl-2-chloroindole-3-carbaldehyde with Et 2-cyanoacetate in the presence of Et3N in EtOH afforded II which showed IC50 of 2.2 μM against PI-hydrolysis in BHK 570 cells expressing mGluRlα receptors.

IC ICM C07D209-18

ICS C07D209-30; A61K031-40

CC 27-11 (Heterocyclic Compounds (One Hetero Atom))
Section cross-reference(s): 1, 63

ST indolyl compd <u>prepn</u> formulation CNS agent; metabotropic glutamate receptor indolyl compd <u>prepn</u>; phosphoinositide hydrolysis inhibitor indolyl compd <u>prepn</u>; antiepileptic indolyl compd <u>prepn</u> formulation; senile dementia indolyl compd

```
prepn formulation; Parkinson's disease indolyl compd
    prepn formulation; Huntington's disease indolyl compd
     prepn formulation; analgesic indolyl compd prepn
     formulation; deficiency disease indolyl compd prepn
     formulation
ΙT
     Nervous system
        (Huntington's chorea, treatment of; preparation of indolyl compds.
        for treatment of diseases in the central nervous system
        related to the metabotropic glutamate receptor system)
ΙT
     Phosphoinositides
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (PI-hydrolysis inhibitors; preparation of indolyl compds. for
        treatment of diseases in the central nervous system related
        to the metabotropic glutamate receptor system)
ΙT
     Disease, animal
        (deficiency, deficiency of mental and motoric performance seen after
        conditions of brain ischemia; preparation of
        indolyl compds. for treatment of diseases in the central
        nervous system related to the metabotropic glutamate receptor system)
IT
     Glutamate receptors
     RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
     (Biological study); PROC (Process)
        (metabotropic, mGluR1; \underline{\textbf{preparation}} of indolyl compds. for
        treatment of diseases in the central nervous system related
        to the metabotropic glutamate receptor system)
IT
     Analgesics
     Anticonvulsants
     Glutamate antagonists
     Nervous system agents
        (preparation of indolyl compds. for treatment of diseases
        in the central nervous system related to the metabotropic glutamate
        receptor system)
IT
     Mental disorder
        (senile psychosis, treatment of; preparation of indolyl compds.
        for treatment of diseases in the central nervous system
        related to the metabotropic glutamate receptor system)
ΙT
     Parkinson's disease
        (treatment of; preparation of indolyl compds. for treatment of
        diseases in the central nervous system related to the
        metabotropic glutamate receptor system)
IT
     188034-08-4P
                    188034-09-5P
                                                   188034-11-9P
                                                                  188034-12-0P
                                   188034-10-8P
     188034-13-1P
                    188034-14-2P
                                   188034-15-3P
                                                   188034-16-4P
                                                                  188034-17-5P
                    188034-19-7P
     188034-18-6P
                                   188034-20-0P
                                                   188034-21-1P
                                                                  188034-22-2P
     188034-23-3P
                    188034-24-4P
                                   188034-25-5P
                                                   188034-26-6P
                                                                  188034-27-7P
     188034-28-8P
                    188034-29-9P
                                   188034-30-2P
                                                   188034-31-3P
                                                                  188034-32-4P
     188034-33-5P
                    188034-34-6P
                                   188034-35-7P
                                                  188034-36-8P
                                                                  188034-37-9P
     188034-38-0P 188034-39-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of indolyl compds. for treatment of diseases
        in the central nervous system related to the metabotropic glutamate
        receptor system)
     105-53-3, Diethyl malonate
                                              2274-42-2
                                                          24279-74-1
ΙT
                                  105-56-6
                               75621-51-1
                                             77655-46-0
                                                          77655-47-1
     75621-49-7
                  75621-50-0
     77655-86-8
                  120069-21-8
                                175137-63-0
                                               188034-40-4
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of indolyl compds. for treatment of diseases
        in the central nervous system related to the metabotropic glutamate
```

#### receptor system)

L119 ANSWER 28 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1997:220659 HCAPLUS Full-text

DOCUMENT NUMBER:

126:211923

TITLE:

Preparation of naphthyloxyacetic acid

derivatives with binding activity to prostaglandin E2

receptor and <u>drugs</u> comprising the same as

active ingredients

INVENTOR(S):

Nagao, Yuuki; Torisu, Kazuhiko; Hamanaka, Nobuyuki

PATENT ASSIGNEE(S): Ono Pharmaceutical Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 162 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

PATENT INFORMATION:

FAMILY ACC. NUM. COUNT:

PA	PATENT NO.					KIND DATE			APPLICATION NO.					DATE			
WO	9705				A1	19970213			WO	1996-	JP18	33		19960702 <			<
	₩:	•	KR,				:							140		D.M.	
	RW:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR, G	3, GR,	lL,	ΙT,	LU,	MC,	NL,	PT,	SE
EP	8454	51			<b>A</b> 1		1998	0603	EP	1996-	9211	46		-	19960	702	<
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	FI
US	6018	068			Α		2000	0125	US	1998-	102			-	19980	126	<
US	6197	993			В1		2001	0306	US	1999-	4406	74		-	19991	116	<
US	2001	0057	60		<b>A</b> 1		2001	0628	US	2001-	7656	76		2	20010	122	<
US	6335	366			B2		2002	0101									
US	2003	0230	96		A1		2003	0130	US	2001-	2106	0		2	20011	219	<
PRIORIT	Y APP	LN.	INFO	.:					JP	1995-	2092	79		<b>A</b> :	L9950	726	<
									WO	1996-	JP18	33		W :	19960	702	<
•									US	1998-	102			A3 .	L9980	126	<
					4				US	.1999-	4406	74		XX :	19991	116	<
									US	2001-	7656	76		A3 2	20010	122	<

MARPAT 126:211923 OTHER SOURCE(S):

ED Entered STN: 05 Apr 1997

Naphthyloxyacetate acid derivs. represented by general formula [I; A = H, C1-4 AB alkylene-CO2R1, C1-4 alkylene-CONR2R3, C1-4 hydroxyalkyl, tetrazolyl-C1-4 alkyl, cyano-C1-4 alkyl; wherein R1 - R3 = H, C1-4 alkyl; E = a single bond or C1-6 alkylene; G = S, SO, SO2, O or NR4; L = C1-6 alkylene, (CH2)mCH:CH(CH2)n or (CH2)xCH(OH)(CH2)y; wherein m, n, y = 0, 1-3; x = 1-3; M = Ph, PhS, PhO, PhNH, Ph2CH, Ph2CHS, Ph2CHO, or Ph2CHNH, each Ph group being optionally substituted by 1-3 of C1-4 alkyl, C1-4 alkoxy, halo, NO2, or CF3; provisos are given] or nontoxic salt, acid addition salts, or hydrates thereof are prepared These compds. bind to PGE2 receptors and exhibit an antagonistic or agonistic effect thereon and are useful as hypolipidemics, medicines for preventing miscarriage, analgesics, antidiarrhea agents, drugs for sleep induction and abortion, diuretics, antidiabetics, purgatives, antiulcer agents, drugs for gastritis, antihypertensives, etc. Thus, TsOCH2CH(OTHP)CH2OPh (preparation given) was condensed with 1-(2-acetylthioethyl)-6-(methoxymethoxy)naphthalene (preparation given) in the presence of NaOEt in EtOH at room temperature for 1 h followed by treatment with a mixture of 4 N aqueous HCl, EtOAc, and MeOH to give the title compound (II). II in vitro inhibited the binding of [3H]PGE2 to CHO cells expressing prostanoid receptor subtype (mouse  ${\tt EP3}\alpha$ ) with Ki value of 0.0086 µM. A tablet formulation containing II was prepared

ICM C07C043-178 IC

> C07C043-196; C07C043-23; C07C217-30; C07C217-48; C07C317-18; c07c317-20; c07c317-22; c07c323-16; c07c323-17; c07c323-18; C07D257-04; A61K031-075; A61K031-085; A61K031-095; A61K031-10;

A61K031-135; A61K031-40

```
CC 25-24 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
Section cross-reference(s): 1
```

ST naphthyloxyacetic acid **prepn** PGE antagonist agonist; prostaglandin E2 receptor antagonist agonist; hypolipidemic naphthyloxyacetic acid; miscarriage prevention naphthyloxyacetic acid; analgesic naphthyloxyacetic acid; antidiarrhea agent naphthyloxyacetic acid; sleep induction naphthyloxyacetic acid; abortion naphthyloxyacetic acid; diuretic naphthyloxyacetic acid; antidiabetic naphthyloxyacetic acid; purgative naphthyloxyacetic acid; antiulcer agent naphthyloxyacetic acid; gastritis naphthyloxyacetic acid; antihypertensive naphthyloxyacetic acid

IT Prostanoid receptors

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(antagonists and agonists; <u>preparation</u> of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as **drugs**)

IT Stomach, disease

(gastritis; preparation of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as drugs)

IT Abortion

(induced; <u>preparation</u> of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as **drugs**)

IT Analgesics

Antidiabetic agents

Antihypertensives

Antiulcer agents

Diarrhea

Diuretics

Hypnotics and Sedatives

Hypolipemic agents

Laxatives

(preparation of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as drugs)

IT Abortion

IT

(spontaneous, prevention; <u>preparation</u> of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as **drugs**)

IT 363-24-6, Prostaglandin E2

RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)

(preparation of naphthyloxyacetic acid derivs. with binding activity to prostaglandin E2 receptor as drugs)

	F = -	•		
187981-08-4P	187981-09-5P	187981-10-8P	187981-11-9P	187981-12-0P
187981-13-1P	187981-14-2P	187981-15-3P	187981-16-4P	187981-17-5P
187981-18-6P	187981-19-7P	187981-20-0P	187981-21-1P	187981-22-2P
187981-23-3P	187981-24-4P	187981-25-5P	187981-26-6P	187981-27-7P
187981-28-8P	187981-29-9P	187981-30-2P	187981-31-3P	187981-32-4P
187981-33-5P	187981-34-6P	187981-35-7P	187981-36-8P	187981-37-9P
187981-38-0P	187981-39-1P	187981-40-4P	187981-41-5P	187981-42-6P
187981-43-7P	187981-44-8P	187981-45-9P	187981-46-0P	187981-47-1P
187981-48-2P	187981-50-6P	187981-52-8P	187981-54-0P	187981-56-2P
187981-58-4P	187981-60-8P	187981-62-0P	187981-64-2P	187981-65-3P
187981-66-4P	187981-67-5P	187981-69-7P	187981-70-0P	187981-72-2P
187981-73-3P	187981-74-4P	187981-75-5P	187981-76-6P	187981-77-7P
187981-78-8P	187981-79-9P·	187981-80-2P	187981-81-3P	187981-82-4P
187981-83-5P	187981-84-6P	187981-85-7P	187981-86-8P	187981-87-9P

187981-99-3P 187982-00-9P 187982-02-1P 187982-04-3P

187981-91-5P

187981-95-9P 187981-96-0P

187981-92-6P

187981-97-1P

187982-06-5P

187981-88-0P

187981-89-1P

187981-93-7P 187981-94-8P

```
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of naphthyloxyacetic acid derivs. with binding
        activity to prostaglandin E2 receptor as drugs)
    74-89-5, Methylamine, reactions 84-58-2, 2,3-Dichloro-5,6-
ΙT
     dicyano-1,4-benzoquinone 91-01-0, Diphenylmethanol 93-56-1,
     1-Phenyl-1,2-ethanediol 96-32-2, Methyl bromoacetate 98-59-9,
     p-Toluenesulfonyl chloride 100-79-8, 2,2-Dimethyl-1,3-dioxolane-4-
                                                    106-48-9,
              106-44-5, 4-Methylphenol, reactions
     4-Chlorophenol 107-30-2, Methoxymethyl chloride 108-95-2, Phenol,
     reactions 108-98-5, Thiophenol, reactions 110-87-2,
                                                            135-76-2, Sodium
     Dihydropyran 119-56-2, 4-Chlorobenzhydrol
                                                 122-60-1
     6-hydroxy-2-naphthalenesulfonate 150-76-5, 4-Methoxyphenol 383-63-1, Ethyl trifluoroacetate 540-51-2, 2-Bromoethanol 541-41-3, Ethyl
                    590-17-0, Bromoacetonitrile 1779-49-3,
     chloroformate
     Methyltriphenylphosphonium bromide 3422-02-4, Benzyl phenylcarbamate
     7677-24-9, Trimethylsilyl cyanide 10387-40-3, Potassium thioacetate
     14347-78-5, (R)-2,2-Dimethyl-1,3-dioxolane-4-methanol 15677-02-8,
     Carboxymethylenetriphenylphosphorane 22323-82-6, (S)-2,2-Dimethyl-1,3-
     dioxolane-4-methanol 26628-22-8, Sodium azide 33892-75-0,
     5-Methoxy-1-tetralone
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of naphthyloxyacetic acid derivs. with binding
        activity to prostaglandin E2 receptor as drugs)
               3813-01-2P 7305-59-1P
                                        20816-78-8P
IT
     538-43-2P
                                                      40348-74-1P
     53379-98-9P 68938-62-5P 69269-77-8P 77204-19-4P 98218-37-2P
     187982-10-1P 187982-12-3P 187982-14-5P 187982-19-0P
                                                               187982-21-4P
                                                 187982-29-2P
     187982-23-6P 187982-25-8P
                                  187982-27-0P
                                                               187982-31-6P
     187982-32-7P 187982-33-8P 187982-34-9P 187982-35-0P
                                                               187982-36-1P
     187982-37-2P 187982-38-3P 187982-39-4P 187982-40-7P
                                                                187982-41-8P
     187982-42-9P 187982-43-0P 187982-44-1P 187982-45-2P
                                                                187982-46-3P
     187982-47-4P 187982-48-5P
                                  187982-49-6P
                                                 187982-50-9P
                                                                187982-51-0P
     187982-52-1P 187982-53-2P 187982-54-3P
                                                 187982-55-4P
                                                                187982-56-5P
     187982-57-6P 187982-58-7P 187982-59-8P 187982-60-1P
                                                                187982-61-2P
     187982-62-3P 187982-63-4P 187982-64-5P 187982-65-6P
                                                               188004-53-7P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of naphthyloxyacetic acid derivs. with binding
        activity to prostaglandin E2 receptor as drugs)
L119 ANSWER 29 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN
                        1997:120865 HCAPLUS Full-text
ACCESSION NUMBER:
DOCUMENT NUMBER:
                         126:132228
                         Polycarbonate compositions containing sulfoxides
TITLE:
                        Mya, Shinya; Kanayama, Satoshi
INVENTOR(S):
                        Mitsubishi Enjiniaringu Purasuchikkusu, Japan
PATENT ASSIGNEE(S):
                         Jpn. Kokai Tokkyo Koho, 5 pp.
SOURCE:
                         CODEN: JKXXAF
DOCUMENT TYPE:
                         Patent
                         Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
                        1
PATENT INFORMATION:
                        KIND
     PATENT NO.
                               DATE
                                           APPLICATION NO.
                                           ______
     ______
                               19961126 JP 1995-142417
                                                                  19950518 <--
     JP 08311322
                         Α
```

JP 3373330 B2 20030204

PRIORITY APPLN. INFO.: JP 1995-142417 19950518 <--

OTHER SOURCE(S):

MARPAT 126:132228

ED Entered STN: 21 Feb 1997

- The compns. contain 100 parts polycarbonates and 0.01-5 parts sulfoxides AB R1S(0)R2, R3S(0)(R4S(0))nR5, or I (R1-3, R5 = C1-30 alkyl, cycloalkyl, alkenyl, aryl, arylalkyl, arylalkenyl, acylalkyl, alkoxyalkyl, aryloxyalkyl, alkoxy, alkoxycarbonyl, pyridyl; where the aryl, arylalkyl, arylalkenyl, and aryloxyalkyl are mononuclear groups and may be substituted with C1-4 alkyl, halo, NO2, NH2, CO2H, CO2Me, OH, and/or OMe at the nuclei and the acylalkyl, alkoxyalkyl, and aryloxyalkyl may have ≥2 of acyl, alkoxy, or aryloxy groups at the alkyl chains; R1-3, R5 may be bonded through covalent bonds; R4, R6, R7 = C1-15 alkylene, alkenylene, arylene; where the arylene is a mononuclear group that may be substituted with C1-4 alkyl, halo, NO2, NH2, CO2H, CO2Me, OH, and/or OMe at the nucleus; n = 1-100). The compns. are resistant to discoloration by ionizing radiation and are useful for medical devices. Iupilon S 2000 (100 parts) was mixed with 1 part Ph2S(O), pelletized, and injection molded to give test pieces, which showed yellowness index 12.3 after 25 kGy 60Co γ ray irradiation
- IC ICM C08L069-00

ICS C08K005-41

- CC 37-6 (Plastics Manufacture and Processing)
  Section cross-reference(s): 38, 63
- ST polycarbonate discoloration prevention sulfoxide; <u>radiation</u> discoloration prevention polycarbonate sulfoxide
- IT Sulfoxides

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(discoloration prevention agents; polycarbonate compns. containing sulfoxides with low discoloration by  $\underline{\textbf{ionizing}}$ 

radiation)

#### IT Ionizing radiation

(polycarbonate compns. containing sulfoxides with low discoloration by ionizing radiation)

IT Polycarbonates, properties

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(polycarbonate compns. containing sulfoxides with low discoloration by ionizing radiation)

IT Medical goods

(polycarbonate compns. containing sulfoxides with low discoloration by ionizing radiation for)

IT Discoloration prevention agents

(sulfoxides; polycarbonate compns. containing sulfoxides with low discoloration by ionizing radiation)

IT 621-08-9, Dibenzyl sulfoxide 945-51-7, Diphenyl sulfoxide 1193-82-4, Phenyl methyl sulfoxide 1600-44-8, Tetramethylene sulfoxide 2168-93-6, Dibutyl sulfoxide

RL: MOA (Modifier or additive use); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(discoloration prevention agent; polycarbonate compns. containing sulfoxides with low discoloration by  $\underline{ionizing}$ 

radiation)

IT 24936-68-3, Iupilon S 2000, properties 25037-45-0, Bisphenol A-carbonic acid copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(polycarbonate compns. containing sulfoxides with low discoloration by ionizing radiation)

HCAPLUS COPYRIGHT 2007 ACS on STN L119 ANSWER 30 OF 34 ACCESSION NUMBER: 1994:605797 HCAPLUS Full-text 121:205797 DOCUMENT NUMBER: Preparation and formulation of TITLE: 17-acylandrosta-3,5-diene-3-carboxylates as steroid 5α-reductase inhibitors Holt, Dennis Alan; Levy, Mark Alan INVENTOR(S): SmithKline Beckman Corp., USA PATENT ASSIGNEE(S): SOURCE: PCT Int. Appl., 69 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent English LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: DATE APPLICATION NO. PATENT NO. KIND DATE \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ 19940526 WO 1993-US11241 19931118 <--WO 9411386 A1 W: AU, BB, BG, BR, BY, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, LV, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, US, UZ, VN RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG ZA 1993-8538 19931116 <--19940913 ZA 9308538 Α 19940913 ZA 1993-8540 19931116 <--ZA 9308540 Α 19931118 <---CA 2149427 19940526 CA 1993-2149427 A1 AU 1994-56717 19931118 <--AU 9456717 19940608 Α CN 1993-114775 19931118 <--CN 1101914 Α 19950426 CN 1993-121434 19931118 <--Α 19950426 CN 1101916 19950906 EP 1994-902307 19931118 <--EP 669932 A1 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE 19960416 JP 1993-512507 19931118 <---JP 08503474 Т 19950517 <--US 5641765 19970624 US 1995-436240 Α 19950530 <--19970624 US 1995-453865 US 5641877 Α A 19921118 <--PRIORITY APPLN. INFO.: GB 1992-24213 GB 1993-16954 A 19930814 <--WO 1993-US11241 W 19931118 <--US 1995-436240 A1 19950517 <--OTHER SOURCE(S): MARPAT 121:205797 Entered STN: 29 Oct 1994 EDTitle compds. [I; A = (saturated) hydrocarbylene; R = substituted alkyl, AΒ (un) substituted cycloalkyl, -heterocyclyl, -(hetero)aryl] were prepared androst-4-en-3-one-17 $\beta$ -carboxylic acid was converted in 4 steps to 17 $\beta$ -(phenethylcarbonyl) androsta-3,5-diene-3- carboxylic acid. I had Ki of 2-85 and 0.2-7nM against isoenzyme 1 and 2 of steroid  $5\alpha$ -reductase, resp. IC ICM C07J003-00 C07J005-00; C07J007-00; C07J009-00; C07J015-00; C07J017-00; C07J033-00; C07J041-00; C07J043-00; C07J075-00 32-4 (Steroids) CC Section cross-reference(s): 1, 63 acylandrostadienecarboxylate prepn steroid reductase inhibitor STProstate gland IT (disease, prostatitis, treatment of, acylandrostadienecarboxylates for) IT Prostate gland (neoplasm, adenocarcinoma, treatment of,

146175-29-3P

157977-50-9P

156699-24-0P

157977-51-0P

156699-29-5P

157977-52-1P

acylandrostadienecarboxylates for)

156699-33-1P

157977-54-3P

139755-35-4P 139755-36-5P

156699-30-8P

157977-53-2P

IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

 $(\underline{\mathtt{preparation}}$  and  $\underline{\mathtt{reaction}}$  of, in  $\underline{\mathtt{preparation}}$  of

steroid  $5\alpha$ -reductase inhibitor)

IT 156699-35-3P 157977-40-7P 157977-41-8P 157977-42-9P 157977-43-0P 157977-44-1P 157977-45-2P 157977-46-3P 157977-47-4P 157977-48-5P 157977-49-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of, as steroid  $5\alpha$ -reductase inhibitor)

IT 302-97-6, Androst-4-en-3-one- $17\beta$ -carboxylic acid 1462-75-5, 3-Phenylpropylmagnesium bromide 2127-03-9, 2,2'-Dipyridyl disulfide 3277-89-2, Phenethylmagnesium bromide 6921-34-2, Benzylmagnesium chloride 35166-78-0, Cyclohexylmethylmagnesium bromide 36278-54-3, 2-(4-Methoxyphenyl) ethylmagnesium bromide 55766-17-1, 2-Cyclohexylethylmagnesium bromide 119169-78-7 126201-52-3 157977-55-4

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in preparation of steroid  $5\alpha$ -reductase inhibitor)

L119 ANSWER 31 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:604953 HCAPLUS Full-text

DOCUMENT NUMBER:

121:204953

TITLE:

SOURCE:

Preparation of benzophenone hydrazones as

pesticides

INVENTOR(S):

Hall, Roger Graham; Pascual, Alfons; Kristiansen, Odd

PATENT ASSIGNEE(S):

Ciba-Geigy A.-G., Switz. Eur. Pat. Appl., 31 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

	PATENT NO.				KIND		DATE		APPLICATION NO.					DATE				
	EP	5817	25 .			A1	-	1994	0202			-810461			19930629			
		R:	ΑT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB, G	R, IE,	. IT, I	ıI, LU,	MC	, NL, PT	, SE		
	US	5340	837			Α		1994	0823	US	1993-	-83245			19930625	<		
	CA	2099	820			<b>A</b> 1		1994	0108	CA	1993-	-209982	0		19930705	<		
	HU	6507	19			A2		1994	0428	HU	1993-	-1955			19930705	<		
	AU	9341	.775			Α		1994	0113	AU	1993-	-41775			19930706	<		
	ZA	9304	1833			Α		1994	0202	ZA	1993-	-4833			19930706	<		
	BR	9302	2770			Α		1994	0208	BR	1993-	-2770			19930706	<		
	CN	1084	1510			Α		1994	0330	CN	1993-	-108008	}		19930706	<		
	MX	9304	1052			Α		2000	0430	MX	1993-	-4052			19930706	<		
	JΡ	0618	34079			Α		1994	0705	JP	1993-	-192916	5		19930707	<		
	US	5405	871			Α		1995	0411	US	1994-	-223795	· '		19940406	<		
PRIO	RIT	APE	PLN.	INFO	. :					CH	1992-	-2147	•	Α	19920707	<		
										US	1993-	-83245		A3	19930625	<		

OTHER SOURCE(S):

MARPAT 121:204953

ED Entered STN: 29 Oct 1994

Title compds. [I; o, p = 0-5; R1, R2 = alkyl, haloalkyl, halo, NO2, OH, alkoxy, haloalkoxy, alkylthio, haloalkylthio, PhO, sulfonylamino, etc.; R1R1, R2R2 = atoms to form rings; R3 = H, alkyl, haloalkyl; R4 = R3, (substituted) Ph, naphthyl; R5 = SR7, SOR7, SO2R7, NO2, cyano, COR8, CO2R8; R7 = alkyl, cycloalkyl, haloalkyl, (substituted) Ph, etc.; R8 = alkyl, haloalkyl,

(substituted) Ph; X = N, CR9; R9 = H, alkyl, haloalkyl, cyano, acyl], were  $\frac{\text{prepared}}{\text{prepared}}$  Thus, 4-chloro-4'- trifluoromethylsulfonyloxybenzophenone hydrazone in dioxane was treated with 1-aza-1-ethanesulfonyl-3-oxapent-1-ene and Et3N followed by 17 h reflux to give title compound II and 1,3-diene tautomer. Numerous I as 400 ppm emulsions gave > 80% control of Spodoptera littoralis on soybean plants.

IC ICM C07C311-51

CS C07C309-65; C07D317-46; C07C251-86; A01N041-04; A01N041-06; A01N043-30; A01N035-10

CC 25-16 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 5

ST benzophenone hydrazone **prepn** pesticide; insecticide benzophenone hydrazone

158063-74-2P 158063-75-3P 158063-76-4P 158063-77-5P IT 158063-73-1P 158063-79-7P 158063-80-0P 158063-81-1P 158063-82-2P 158063-78-6P 158063-84-4P 158063-85-5P 158063-86-6P 158063-87-7P 158063-83-3P 158063-91-3P 158063-92-4P 158063-88-8P 158063-89-9P 158063-90-2P 158063-97-9P 158063-93-5P 158063-94-6P 158063-95-7P 158063-96-8P 158064-01-8P 158064-02-9P 158063-98-0P 158063-99-1P 158064-00-7P 158064-05-2P 158064-06-3P 158064-07-4P 158064-04-1P 158064-03-0P 158064-11-0P 158064-12-1P 158064-08-5P 158064-09-6P 158064-10-9P 158064-15-4P 158064-16-5P 158064-17-6P 158064-13-2P 158064-14-3P 158064-20-1P 158064-21-2P 158064-22-3P 158064-18-7P 158064-19-8P 158064-25-6P 158064-26-7P 158064-27-8P 158064-23-4P 158064-24-5P 158064-30-3P 158064-31-4P 158064-32-5P 158064-28-9P 158064-29-0P 158064-35-8P 158064-36-9P 158064-37-0P 158064-33-6P 158064-34-7P 158064-41-6P 158064-42-7P 158064-39-2P 158064-40-5P 158064-38-1P 158064-47-2P 158064-43-8P 158064-44-9P 158064-45-0P 158064-46-1P 158064-51-8P 158064-52-9P 158064-48-3P 158064-49-4P 158064-50-7P 158064-55-2P 158064-56-3P 158064-57-4P 158064-53-0P 158064-54-1P 158064-62-1P 158064-60-9P 158064-61-0P 158064-58-5P 158064-59-6P 158064-64-3P 158064-65-4P 158064-66-5P 158064-63-2P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as pesticide)

IT 123-54-6, Pentane-2, 4-dione, reactions 65672-02-8 78930-87-7

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, in preparation of pesticide)

L119 ANSWER 32 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER:

1994:107004 HCAPLUS Full-text

DOCUMENT NUMBER:

120:107004

TITLE:

Imidazole histamin H3 receptors antagonists

INVENTOR(S):

Schwartz, Jean Charles; Arrang, Jean Michel; Garbarg, Monique; Lecomte, Jeanne Marie; Ganellin, Charon

Robin; Fkyerat, Abdellatif; Tertiuk, Wasyl; Schunack,

Walter; Lipp, Ralph; et al.

PATENT ASSIGNEE(S):

Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.; Societe Civile Bioprojet

SOURCE:

PCT Int. Appl., 130 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

, 011 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
	<del>-</del>	<del></del> ,					
WO 9314070	A2	19930722	WO 1993-FR15	19930108 <			

```
WO 9314070
                                19930819
        W: CA, JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
                                19930716
                                            FR 1992-189
                                                                    19920110 <--
    FR 2686084
                          A1
    FR 2686084
                                19951222
                          B1
                                            CA 1993-2105867
                                                                    19930108 <--
    CA 2105867
                          A1
                                19930711
    CA 2105867
                          С
                                19930722
    EP 597088
                          A1
                                19940518
                                            EP 1993-914482
                                                                    19930108 <--
     EP 597088
                          В1
                                20001206
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE
                          T
                                19940707
                                            JP 1993-512191
                                                                    19930108 <--
     JP 06506003
                          B2
                                20061004
     JP 3829259
                          Т
                                20001215
                                            AT 1993-914482
                                                                    19930108 <--
    AT 197951
                         ·T3
                                            ES 1993-914482
                                                                    19930108 <--
     ES 2154270
                                20010401
                                                                    19930108 <--
     PT 597088
                          Т
                                20010430
                                            PT 1993-914482
    US 5559113
                          Α
                                19960924
                                            US 1994-117161
                                                                    19940128 <--
    US 5708171
                          Α
                                19980113
                                            US 1996-663679
                                                                    19960614 <--
                          E1
                                20010731
                                            US 2000-544755
                                                                    20000406 <--
     US 37303
                                            GR 2001-400244
                                                                    20010214 <--
     GR 3035414
                                20010531
PRIORITY APPLN. INFO.:
                                            FR 1992-189
                                                                 A 19920110 <--
                                            WO 1993-FR15
                                                                 W 19930108 <--
                                            US 1994-117161
                                                                 A3 19940128 <--
OTHER SOURCE(S):
                         MARPAT 120:107004
     Entered STN:
                   05 Mar 1994
ED
     The title compds. I and II [A = (un)saturated (un)branched (un)substituted
AΒ
     hydrocarbon chain; B = (CH2)n, (CH2)mO, (CH2)mS; m = 1,2; n = 0-5, C2-8
     alkylene; X = O, S, (un) substituted NH, NHCO, NHCONH, NHCSNH, NHCS, O2C, CO2,
     etc.; Y = (un)branched C1-8 alkyl, C3-6 cycloalkyl, bicycloalkyl,
     cycloalkenyl, (un) substituted aryl, 5- or 6-membered heterocyclic group, etc.]
     which are histamine H3 receptor antagonists and useful as sedatives,
     anticonvulsants, psychostimulants, antiallergics, antiulcer drugs (no data),
     etc., are prepared Thus, 3-cyclopentylpropanoyl chloride was esterified with
     3-(1H-imidazol-4- yl)propanol hydrochloride and the intermediate ester was
     neutralized with maleic acid to give 3-(1H-imidazol-4-yl)propyl 3-
     cyclopentylpropanoate maleic acid salt (III). III had an apparent inhibition
     constant for rat brain H3 histamine receptors of 3 nM.
IC
     ICM C07D233-64
     ICS C07D233-84; C07D403-12; C07D401-12; C07D417-12; A61K031-415
     28-9 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1
     imidazole prepn histamine receptor antagonist; antiulcer
ST
     imidazole prepn;; sedative imidazole prepn;
     anticonvulsant imidazole prepn; psychostimulant imidazole
     prepn; antiallergic imidazole prepn
ΙT
                  152028-19-8P
                                 152028-20-1P
                                                 152028-21-2P
                                                                152028-23-4P
     7728-79-2P
     152028-25-6P
                    152028-27-8P
                                   152028-29-0P
                                                   152028-31-4P
                                                                  152028-33-6P
                                    152028-39-2P
                                                   152028-41-6P
                                                                  152028-43-8P
     152028-35-8P
                    152028-37-0P
                                                   152028-51-8P
                                                                  152028-53-0P
     152028-45-0P
                    152028-47-2P
                                    152028-49-4P
     152028-55-2P
                    152028-56-3P
                                    152028-59-6P
                                                   152028-61-0P
                                                                  152028-62-1P
                                                   152028-70-1P
                                                                  152028-72-3P
     152028-64-3P
                    152028-66-5P
                                    152028-68-7P
                    152028-76-7P
                                                                  152028-83-6P
                                    152028-78-9P
                                                   152028-80-3P
     152028-74-5P
                                                   152028-93-8P
     152028-85-8P
                    152028-88-1P
                                    152028-91-6P
                                                                  152028-95-0P
     152028-97-2P
                    152028-99-4P
                                    152029-01-1P
                                                   152029-03-3P
                                                                  152029-05-5P
     152029-08-8P
                    152029-10-2P
                                    152029-15-7P
                                                   152029-17-9P
                                                                  152029-18-0P
                                                   152029-25-9P
                                                                  152029-27-1P
     152029-19-1P
                    152029-20-4P
                                    152029-22-6P
     152029-29-3P
                    152029-31-7P
                                    152029-33-9P
                                                   152029-35-1P
                                                                  152029-36-2P
                                                   152029-46-4P
     152029-38-4P
                    152029-42-0P
                                    152029-44-2P
                                                                  152029-48-6P
     152029-50-0P
                                                   152029-54-4P
                                                                  152029-55-5P
                    152029-52-2P
                                    152029-53-3P
```

152029-61-3P

152029-71-5P

152029-63-5P

152029-73-7P

152029-65-7P

152029-75-9P

152029-57-7P

152029-67-9P

152029-59-9P

152029-69-1P

152029-83-9P

152029-84-0P

152029-77-1P

152029-79-3P

```
152029-86-2P
                    152029-88-4P
                                   152029-89-5P
                                                  152029-91-9P
                                                                  152029-93-1P
     152029-94-2P
                    152029-95-3P
                                   152029-97-5P
                                                  152029-98-6P
                                                                  152030-00-7P
     152030-02-9P
                    152030-04-1P
                                   152030-05-2P
                                                  152030-07-4P
                                                                  152030-09-6P
     152030-11-0P
                    152030-12-1P
                                   152030-14-3P
                                                  152030-15-4P
                                                                  152030-16-5P
     152030-17-6P
                    152030-18-7P
                                   152030-19-8P
                                                  152030-21-2P
                                                                  152030-22-3P
     152030-24-5P
                    152030-26-7P
                                   152030-28-9P
                                                  152030-30-3P
                                                                  152030-31-4P
     152030-33-6P
                    152030-35-8P
                                   152030-36-9P
                                                  152030-38-1P
                                                                  152030-39-2P
     152030-41-6P
                                                  152030-46-1P
                    152030-43-8P
                                   152030-45-0P
                                                                  152030-47-2P
     152030-48-3P
                    152030-51-8P
                                   152030-56-3P
                                                  152645-93-7P
                                                                  152645-94-8P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and histamine H3 receptor antagonists activity of)
IT
     152029-07-7P
                                   152029-16-8P
                    152029-12-4P
                                                 152029-40-8P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and histamine H3 receptor antagonists activity of,
        reaction of)
ΙT
                   152028-57-4P
                                  152030-49-4P
                                                 152030-50-7P
     38603-70-2P
                                                                152030-52-9P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, in preparation of
        histamine H3 receptor antagonists)
     51-45-6, Histamine, reactions 60-23-1, 2-Aminoethanethiol
IT .
     76-83-5, Triphenylmethyl chloride
                                        86-52-2 90-15-3, 1-Naphthol
     95-89-6, 2-Chloro-3,6-dimethylpyrazine
                                             99-76-3, Methyl 4-hydroxybenzoate
     100-00-5, 1-Chloro-4-nitrobenzene 100-02-7, 4-Nitrophenol,
                 100-14-1, 4-Nitrobenzyl chloride
     reactions
                                                   103-71-9,
     Phenylisocyanate, reactions
                                  104-12-1, 4-Chlorophenylisocyanate
     104-83-6
                106-41-2, 4-Bromophenol
                                          109-04-6, 2-Bromopyridine
                                                                       118-93-4,
     2-Hydroxyacetophenone
                             120-47-8
                                        123-07-9, 4-Ethylphenol
                                                                 135-19-3,
                             150-76-5, 4-Methoxyphenol
     2-Naphthol, reactions
                                                         329-01-1,
     3-Trifluoromethylphenylisocyanate 371-41-5, 4-Fl
4-Trifluoromethylphenol 554-84-7, 3-Nitrophenol
                                         371-41-5, 4-Fluorophenol
                                                                     402-45-9,
                                                          591-35-5,
                          615-20-3, 2-Chlorobenzothiazole
     3,5-Dichlorophenol
                                                             622-58-2,
     4-Methylphenylisocyanate
                              637-59-2 645-56-7, 4-Propylphenol
                                                                       673-50-7
                               771-61-9, Pentafluorophenol 872-35-5,
     767-00-0, 4-Cyanophenol
                           872-82-2, 1H-Imidazole-4-ethanol
     2-Mercaptoimidazole
                                                             873-62-1,
     3-Hydroxybenzonitrile
                             1072-95-3
                                        1124-62-5
                                                    1195-45-5,
                                1462-75-5, 3-Phenylpropylmagnesium bromide
     4-Fluorophenylisocyanate
     1548-13-6, 4-Trifluoromethylphenylisocyanate
                                                    1722-12-9,
     2-Chloropyrimidine
                          1849-36-1, 4-Nitrothiophenol
                                                         1943-82-4,
                               2285-12-3, 2-Trifluoromethylphenylisocyanate
     2-Phenylethylisocyanate
     2637-34-5, 2-Mercaptopyridine
                                    3034-53-5, 2-Bromothiazole
                                                                   3173-53-3,
                            3173-56-6, Benzylisocyanate
                                                           3218-02-8,
     Cyclohexylisocyanate
     Cyclohexylmethanamine
                             3320-86-3, 2-Nitrophenylisocyanate
                                                                   3465-72-3,
     trans-Urocanic acid
                           4461-33-0, Benzoylisocyanate
                                                          4548-45-2,
                                4830-93-7 5470-18-8, 2-Chloro-3-nitropyridine
     2-Chloro-5-nitropyridine
     6429-10-3
                13198-73-7
                              13400-46-9, 1H-Imidazole-4-methanamine
     14432-16-7, 2-Chloro-4-nitropyridine N-oxide
                                                   14508-49-7,
     2-Chloropyrazine 14649-03-7 15845-62-2, 4-Iodophenylisocyanate
     23138-56-9 23785-22-0, 4-Chloromethylimidazole 24734-68-7,
                              25694-89-7, Cyclopropylmethylisocyanate
     3-Phenylpropylmercaptan
     30280-44-5, 4-Chlorobenzylisocyanate
                                            32366-02-2; N-Benzyl-N-
     methylcarbamoyl chloride
                                32385-58-3
                                             32673-41-9
                                                           33375-06-3
     38585-61-4
                  40546-33-6, 1H-Imidazole-4-propanamine
                                                            49549-75-9.
     1H-Imidazole-4-propanol
                               52334-81-3, 2-Chloro-5-trifluoromethylpyridine
                  55245-73-3
                               63289-53-2, 4-Nitrobenzylisocyanate
     54589-53-6
                                                                      64473-34-3
     64747-82-6
                  68664-23-3
                               73781-91-6
                                            74003-34-2
                                                          79463-77-7
     82258-76-2
                  84157-77-7
                               99935-67-8
                                            102422-55-9
                                                           104091-57-8
                                 127607-62-9
     111016-57-0
                   122394-21-2
                                                128255-31-2,
     2-Iodophenylisocyanate 132740-43-3
                                            141400-29-5 152028-81-4
```

152028-86-9 152028-89-2 152029-13-5 152029-23-7 152029-85-1 152029-95-3

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of histamine H3 receptor antagonists)

L119 ANSWER 33 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1992:105966 HCAPLUS Full-text

DOCUMENT NUMBER: 116:105966

TITLE: Preparation of  $\Delta 2$ -cephem sulfones as

elastase inhibitors

INVENTOR(S): Bissolino, Pier Luigi; Alpegiani, Marco; Perrone,

Ettore; Cassinelli, Giuseppe

PATENT ASSIGNEE(S): Farmitalia Carlo Erba S.r.l., Italy

SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	EP 457381	A2	19911121	EP 1991-200943	19910419 <		
	EP 457381	<b>A</b> 3	19920708		•		
	EP 457381	B1	19960306				
	R: DE, GB, IT						
	JP 04226995	Α	19920817	JP 1991-139708	19910515 <		
E	PRIORITY APPLN. INFO.:			GB 1990-10941 A	19900516 <		
C	THER SOURCE(S):	MARPAT	116:105966				

ED Entered STN: 20 Mar 1992

Title compds. I [R7 = halo, C1-4 alkoxy; R4 = CHR5CHR6Y, CR5:CHY; R5, R6 = H, (substituted) C1-7 alkyl, Ph, CH2Ph; R5R6 = (carboxy)propylene, (carboxy)butylene; Y = electron-withdrawing group; R = H, C1-7 alkyl, (substituted) CH2Ph, Ph2CH; R3 = Me, C1-4 alkoxymethyl; R2 = H, R4] were prepared as elastase inhibitors useful for the treatment of inflammatory and degenerative disease. Thus, benzhydryl 7α-chloro-3-methyl-3-cephem-4-carboxylate-1,1-dioxide was dissolved in MeCOCH:CH2, the solution was cooled to 0°, and Et3N was added. The mixture was stirred 1 h at 0° to give title compound I (R7 = C1, R4 = CH2CH2COMe, R = Ph2CH, R3 = Me, R2 = H). Kinetic parameters for inhibition of human leukocyte elastase by other I were determined

IC ICM C07D501-00 ICS A61K031-545

CC 26-5 (Biomolecules and Their Synthetic Analogs)
 Section cross-reference(s): 1

ST cephem sulfone **prepn** antiinflammatory; elastase inhibitor cephem sulfone; degenerative **disease** treatment cephem sulfone

IT Respiratory distress **syndrome** 

(adult, treatment of,  $\Delta 2$ -cephem sulfones for)

IT Disease

(degenerative, treatment of,  $\Delta 2$ -cephem sulfones for)

IT 138831-30-8P 138831-31-9P 138831-32-0P 138831-33-1P 138831-34-2P 138831-35-3P 138831-36-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as elastase inhibitor)

IT 13831-03-3, tert-Butyl propiolate

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of)

IT 137115-97-0 138831-29-5

RL: RCT (Reactant); RACT (Reactant or reagent)
(<u>reaction</u> of, with Me vinyl ketone, in <u>preparation</u> of elastase inhibitors)

IT 78-94-4, Methyl vinyl ketone, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)

(<u>reaction</u> of, with cephem sulfone derivative, in <u>preparation</u>
of elastase inhibitors)

IT 138831-28-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(<u>reaction</u> of, with tert-Bu propiolate, in <u>preparation</u> of elastase inhibitors)

L119 ANSWER 34 OF 34 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1983:126134 HCAPLUS Full-text

DOCUMENT NUMBER: 98:126134

TITLE: 1,4-Thiazanecarboxylic acid derivatives and their use

PATENT ASSIGNEE(S): MUDIT Societe Fiduciaire Enregistree, Liechtenstein

SOURCE: Belg., 68 pp. CODEN: BEXXAL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	ENT NO.		KIND	DATE	APPLICATION NO.		DATE	
	BE	893025		A1	19821029	BE 1982-207967		19820429	<
	WO	8203860		<b>A</b> 1	19821111	WO 1982-BE9		19820421	<
		W: AT,	AU, C	H, DE, D	OK, FI, GB,	JP, NL, NO, SE, US			
	AU	8283941		Α	19821207	AU 1982-83941		19820421	<
	NL	8220153		A	19830301	NL 1982-20153		19820421	<
	DΕ	3242665		TO	19830407	DE 1982-3242665	•	19820421	<
	JP	58500713	}	${f T}$	19830506	JP 1982-501451		19820421	<
	JΡ	03030592	•	В	19910430				
	GB	2111056		Α	19830629	GB 1982-35353		19820421	<
•	GB	2111056		В	19850306				
	FR	2509303		A1	19830114	FR 1982-7461		19820429	<
	ZA	8202926		Α	19830330	ZA 1982-2926		19820429	<
	DK	8205543		Α	19821214	DK 1982-5543		19821214	<
	FI	8204279		A	19821214	FI 1982-4279		19821214	<
	FI	66366		В	19840629				
	SE	8207294		Α	19821221	SE 1982-7294		19821221	<
	NO	8204398		Α	19821228	NO 1982-4398		19821228	<
PRIO	RITY	APPLN.	<pre>INFO.:</pre>			LU 1981-83327	A	19810429	<
						BE 1981-83327	Α	19810429	<
						WO 1982-BE9	Α	19820421	<
							_		

OTHER SOURCE(S): CASREACT 98:126134; MARPAT 98:126134

ED Entered STN: 12 May 1984

Title compds. I [n = 0, 1, 2; R = H, alkyl, acyl, CONH2; R1 and R2 (same or different) are H, alkyl, Ph, halo-, alkyl-, or alkoxyphenyl, or R1 and R2 form a spiro ring which can contain hetero atoms; R3 = OH, (un) substituted alkyl, (un) substituted amino, 3-phthalidyloxy, 1-succinimidoethoxy, or R and R3 form a fused hydantoin ring; R4 and R5 (same or different) are H, alkyl, Ph, halo-, alkyl-, or alkoxyphenyl, (un) esterified CH2CO2H; R6 = H, alkyl, Ph, halo-, alkyl-, or alkoxyphenyl] were <a href="maintended">prepared</a>, and they exhibited antithrombotic activity. Penicillamine was converted to S-(2-hydroxyethyl)penicillamine and S-(2-chloroethyl)penicillamine hydrochloride (II), and II was heated with Et3N in DMF to give I (R = R4 = R5 = R6 = H, R1 = R2 = Me, R3 = OH, n = 0).

ICI A61

```
28-14 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1, 63
ST
     thiazanecarboxylic acid prepn antithrombotic
IT
     106-95-6, reactions
                           540-51-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (etherification by, of penicillamine)
IT
     83573-53-9P
                   84915-43-5P
                                  84915-46-8P
                                                84915-48-0P
                                                               84915-49-1P
                   84915-54-8P
                                                84915-56-0P
                                                               84915-57-1P
     84915-52-6P
                                  84915-55-9P
     84915-58-2P
                   84915-59-3P
                                  84915-60-6P
                                                84915-61-7P
                                                               84915-62-8P
     84915-63-9P
                   84915-64-0P
                                  84915-65-1P
                                                84915-66-2P
                                                               84915-67-3P
                                  84915-70-8P
                                                84915-71-9P
                                                               84915-72-0P
     84915-68-4P
                   84915-69-5P
                                                               84915-79-7P
     84915-73-1P
                   84915-74-2P
                                  84915-76-4P
                                                84915-78-6P
     84915-80-0P
                   84915-81-1P
                                  84915-82-2P
                                                84915-83-3P
                                                               84915-84-4P
                                  84915-87-7P
     84915-85-5P
                   84915-86-6P
                                                84915-88-8P
                                                               84935-17-1P
     84935-20-6P
                   84985-33-1P
                                  84985-34-2P
                                                84985-35-3P
                                                               84985-36-4P
     84985-39-7P
                   84985-40-0P
                                  84985-41-1P
                                                84985-42-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation and antithrombotic activity of)
     84915-45-7P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclization of)
IT
     84915-50-4P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and cyclocondensation of)
     84915-47-9P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and hydrobromination of)
     84915-44-6P
IT
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, with hydrogen chloride)
                                  84915-91-3P
                                                84915-92-4P
IT
     84915-89-9P
                    84915-90-2P
                                                               84915-94-6P
     84915-95-7P
                    84915-96-8P
                                  84915-97-9P
                                                84915-98-0P
                                                               84915-99-1P
     84916-00-7P
                    84916-01-8P
                                  84916-02-9P
                                                84916-03-0P
                                                               84916-04-1P
                                                84916-08-5P
     84916-05-2P
                    84916-06-3P
                                  84916-07-4P
                                                               84935-16-0P
     84935-18-2P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (preparation of)
IT
     74-88-4, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (N-alkylation by, of thiazanecarboxylic acid derivative)
```

```
=> d que nos 183
L6
                STR
L7
                STR
            547 SEA FILE=REGISTRY SSS FUL L7
L9
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L12
L32
                QUE ABB=ON PLU=ON
                                    REDDY, E?/AU
                QUE ABB=ON PLU=ON REDDY, P?/AU
L33
                QUE ABB=ON PLU=ON REDDY, M?/AU
L34
                QUE ABB=ON PLU=ON REDDY, R?/AU
L35
                QUE ABB=ON PLU=ON BELL, S?/AU
L36
                QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO (W) NOVA)
L37
                )/CS,SO,PA
L39
                QUE ABB=ON PLU=ON PROLIFER?
L40
                QUE ABB=ON PLU=ON DISEAS? OR DISORDER? OR SYNDROM? OR
               MALADY OR SICKNESS OR ILLNESS OR CONDITION
                QUE ABB=ON PLU=ON HEMANGIOMAT?
L41
                QUE ABB=ON PLU=ON
                                    MULTIPLE (W) SCLERO?
L42
L43
                QUE ABB=ON PLU=ON MS
                QUE ABB=ON PLU=ON MYELODEGENER?
L44
                QUE ABB=ON PLU=ON ?DEGENER? (3A) ?MYELO?
L45
                QUE ABB=ON PLU=ON GANGLIONEUROMATO?
QUE ABB=ON PLU=ON KELOID?
L46
L47
                QUE ABBEON PLUEON PAGET?
L48
                QUE ABB=ON PLU=ON FIBROCYS?
L49
                QUE ABB=ON PLU=ON COLORECT?
L50
                QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER?
L51
                QUE ABB=ON PLU=ON BRAIN?
L52
                    ABB=ON PLU=ON LEUKEM? OR LEUKAEM?
                QUE
L53
                QUE ABB=ON PLU=ON IONIZ? OR IONIS?
L54
                QUE ABB=ON PLU=ON RADIATION
L55
L56
                OUE ABB=ON PLU=ON OPTIC?
L57
                QUE ABB=ON PLU=ON ISOMER?
                QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?
L58
                QUE ABB=ON PLU=ON SARCOID?
QUE ABB=ON PLU=ON PERONIES
L59
L60
                QUE ABB=ON PLU=ON DUPUTREN
L61
                QUE ABB=ON PLU=ON FIBROSIS
L62
                QUE ABB=ON PLU=ON CIRRHO?
L63
                QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?
L64
                QUE ABB=ON PLU=ON
                                     ?VASCULAR?
L65
                                     RESTENO?
L66
                QUE ABB=ON
                             PLU=ON
                QUE ABB=ON PLU=ON
                                     ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?S
L67
                ARCOM? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR
                 ?DYPLAS?
                QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISA
L68
                RCOM? OR ANTITUM? OR ANTINEOPLAS?
                QUE ABB=ON PLU=ON OVARY OR OVARIAN
L69
                OUE ABB=ON PLU=ON BREAST OR MAMMAR?
L70
                QUE ABB=ON
L71
                            PLU=ON PROSTAT?
                QUE ABB=ON PLU=ON TESTIS OR TESTIC?
L72
L73
                QUE ABB=ON PLU=ON LUNG
L74
                QUE
                    ABB=ON PLU=ON
                                     PULMONAR?
L75
                QUE ABB=ON PLU=ON KIDNEY OR RENAL?
             15 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L77
              6 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L39 OR L40 OR L41 OR
L78
                L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR
                L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR
                L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR
                L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
```

```
OUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
L79
L80
               OUE ABB=ON 'PLU=ON MANUFACT?
            14 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L79 OR L80)
L81
            15 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 OR L78 OR L81
L82
             4 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR
L83
               L35 OR L36 OR L37)
=> d que nos 192
               STR
L7
               STR
           547 SEA FILE=REGISTRY SSS FUL L7
L9
           339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
L12
L32
               QUE ABB=ON PLU=ON REDDY, E?/AU
               QUE ABB=ON PLU=ON REDDY, P?/AU
L33
               QUE ABB=ON PLU=ON REDDY, M?/AU
L34
L35
               QUE ABB=ON PLU=ON REDDY, R?/AU
               QUE ABB=ON PLU=ON BELL, S?/AU
L36
L37
               QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
                )/CS,SO,PA
           264 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND USPATFULL/LC
L90
L91
             1 SEA FILE=USPATFULL ABB=ON PLU=ON L90
             1 SEA FILE=USPATFULL ABB=ON PLU=ON L91 AND (L32 OR L33 OR L34
L92
               OR L35 OR L36 OR L37)
=> d que nos 196
L6
                STR
L7
              ·STR
L9
           547 SEA FILE=REGISTRY SSS FUL L7
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
               OUE ABB=ON PLU=ON REDDY, E?/AU
L32
L33
                QUE ABB=ON PLU=ON REDDY, P?/AU
                QUE ABB=ON PLU=ON REDDY, M?/AU
L34
                QUE ABB=ON PLU=ON REDDY, R?/AU
L35
L36
                QUE ABB=ON PLU=ON BELL, S?/AU
L37
                QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
                )/CS,SO,PA
L94
            323 SEA FILE=REGISTRY ABB=ON PLU=ON L12 AND TOXCENTER/LC
L95
              3 SEA FILE=TOXCENTER ABB=ON PLU=ON L94
              3 SEA FILE=TOXCENTER ABB=ON PLU=ON L95 AND (L32 OR L33 OR L34
L96
                OR L35 OR L36 OR L37)
=> d que nos 1108
                STR
                QUE ABB=ON PLU=ON REDDY, E?/AU
L32
                QUE ABB=ON PLU=ON REDDY, P?/AU
L33
                QUE ABB=ON PLU=ON REDDY, M?/AU
L34
                QUE ABB=ON PLU=ON REDDY, R?/AU
L35
                QUE ABB=ON PLU=ON BELL, S?/AU
L36
                QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
L37
                )/CS,SO,PA
L104
            112 SEA FILE=WPIX SSS FUL L6
              4 SEA FILE=WPIX ABB=ON PLU=ON L104/DCR
L105
              4 SEA FILE-WPIX ABB-ON PLU-ON (RAI110/DCN OR RAI11Q/DCN OR
L106
                RAI11R/DCN OR RAI11S/DCN OR RAI11T/DCN OR RAI11U/DCN OR
                RAI12A/DCN OR RAI12B/DCN OR RAI12C/DCN OR RAI12D/DCN OR
                RAI12E/DCN OR RAI12F/DCN OR RAI12G/DCN OR RAI12H/DCN OR
```

RAI2CA/DCN OR RAI2CB/DCN OR RAI2CC/DCN OR RAI2CD/DCN OR

```
RAI2CE/DCN OR RAI2CF/DCN OR RAI2CG/DCN OR RAI2CH/DCN OR
               RAI2CJ/DCN OR RAI2CK/DCN OR RAI2CL/DCN OR RAI2CM/DCN OR
               RAI2CN/DCN OR RAI2CO/DCN OR RAI2CP/DCN OR RAI2CQ/DCN OR
               RAI2CR/DCN OR RAI2CS/DCN OR RAI2CT/DCN OR RAI2CU/DCN OR
               RAI2CV/DCN OR RAI2CW/DCN OR RAI2CX/DCN OR RAI2CY/DCN OR
               RAI2CZ/DCN OR RAI2C5/DCN OR RAI2C6/DCN OR RAI2C7/DCN OR
               RAI2C8/DCN OR RAI2C9/DCN OR RAI2DA/DCN OR RAI2DB/DCN OR
               RAI2DC/DCN OR RAI2DD/DCN OR RAI2DE/DCN OR RAI2DF/DCN OR
               RAI2DG/DCN OR RAI2DH/DCN OR RAI2DJ/DCN OR RAI2DJ/DCN OR
               RAI2DK/DCN OR RAI2DL/DCN OR RAI2DM/DCN OR RAI2DN/DCN OR
               RAI2DO/DCN OR RAI2DP/DCN OR RAI2DQ/DCN OR RAI2DR/DCN OR
               RAI2DS/DCN OR RAI2DT/DCN OR RAI2DU/DCN OR RAI2DV/DCN OR
               RAI2DX/DCN OR RAI2DY/DCN OR RAI2DZ/DCN OR RAI2D0/DCN OR
               RAI2D1/DCN OR RAI2D2/DCN OR RAI2D3/DCN OR RAI2D4/DCN OR
               RAI2D5/DCN OR RAI2D6/DCN OR RAI2D7/DCN OR RAI2D8/DCN OR
               RAI2D9/DCN OR RAI2EA/DCN OR RAI2E0/DCN OR RAI2E1/DCN OR
               RAI2E2/DCN OR RAI2E3/DCN OR RAI2E4/DCN OR RAI2E5/DCN OR
               RAI2E6/DCN OR RAI2E7/DCN OR RAI2E8/DCN OR RAI2E9/DCN OR
               RAJKMO/DCN OR RAJKMP/DCN OR RAJKN1/DCN OR RAJKN2/DCN OR
               RAJKN3/DCN OR RAJKOB/DCN OR RAJKOC/DCN OR RAJKOD/DCN OR
               RAJKOE/DCN OR RAJKOF/DCN OR RAJKOH/DCN OR
               RAJKOI/DCN OR RAJKOO/DCN OR RANXKV/DCN OR RANXKW/DCN OR
               RANXKX/DCN OR RANXKY/DCN OR RANXKZ/DCN OR RANXLO/DCN OR
               RANXL1/DCN OR RANXL2/DCN)
L107
              4 SEA FILE-WPIX ABB-ON PLU-ON L105 OR L106
L108
              4 SEA FILE-WPIX ABB-ON PLU-ON L107 AND (L32 OR L33 OR L34 OR
               L35 OR L36 OR L37)
=> d que nos 1126
L37
               QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO (W) NOVA)
               )/CS,SO,PA
L38
               QUE ABB=ON PLU=ON (REDDY OR BELL)/AU
L123
               QUE ABB=ON PLU=ON UNSAT? OR ?ALKENYL?
               QUE ABB=ON PLU=ON ?SULFOXID?
L124
            16 SEA FILE=JAPIO ABB=ON PLU=ON L123(7A)L124
L125
             O SEA FILE-JAPIO ABB-ON PLU-ON L125 AND (L37 OR L38)
L126
=> d que nos 1120
L6
L7
                STR
L9
           547 SEA FILE=REGISTRY SSS FUL L7
L12
            339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6
               QUE ABB=ON PLU=ON REDDY, E?/AU
L32
               QUE ABB=ON PLU=ON REDDY, P?/AU
L33
L34
               QUE ABB=ON PLU=ON REDDY, M?/AU
L35
               QUE ABB=ON PLU=ON REDDY, R?/AU
L36
               QUE ABB=ON PLU=ON BELL, S?/AU
L37
                QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA)
                )/CS,SO,PA
                QUE ABB=ON PLU=ON PROLIFER?
L39
                QUE ABB=ON PLU=ON DISEAS? OR DISORDER? OR SYNDROM? OR
L40
               MALADY OR SICKNESS OR ILLNESS OR CONDITION
L41
                QUE ABB=ON PLU=ON HEMANGIOMAT?
L42
               QUE ABB=ON PLU=ON MULTIPLE (W) SCLERO?
L43
               QUE
                   ABB=ON PLU=ON MS
                            PLU=ON MYELODEGENER?
L44
               QUE
                    ABB=ON
L45
                QUE ABB=ON PLU=ON ?DEGENER? (3A) ?MYELO?
L46
                QUE ABB=ON PLU=ON GANGLIONEUROMATO?
```

```
KELOID?
L47
               QUE ABB=ON
                           PLU=ON
L48
               QUE ABB=ON
                           PLU=ON
                                   PAGET?
L49
               OUE ABB=ON
                           PLU=ON
                                   FIBROCYS?
                           PLU=ON COLORECT?
L50
               QUE ABB=ON
L51
               QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER?
L52
               QUE ABB=ON
                           PLU=ON BRAIN?
               QUE ABB=ON PLU=ON LEUKEM? OR LEUKAEM?
L53
               QUE ABB=ON PLU=ON IONIZ? OR IONIS?
L54
               QUE ABB=ON PLU=ON RADIATION
L55
               QUE ABB=ON PLU=ON OPTIC?
L56
L57
               QUE ABB=ON PLU=ON ISOMER?
L58
               QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?
L59
               QUE ABB=ON PLU=ON SARCOID?
               QUE ABB=ON PLU=ON PERONIES
L60
               QUE ABB=ON PLU=ON DUPUTREN
L61
               QUE ABB=ON PLU=ON FIBROSIS
L62
               QUE ABB=ON PLU=ON CIRRHO?
L63
               QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?
L64
L65
               QUE ABB=ON PLU=ON ?VASCULAR?
               QUE ABB=ON PLU=ON RESTENO?
L66
               QUE ABB=ON PLU=ON ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?S
L67
               ARCOM? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR
                ?DYPLAS?
               QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISA
L68
               RCOM? OR ANTITUM? OR ANTINEOPLAS?
               QUE ABB=ON PLU=ON OVARY OR OVARIAN
L69
               QUE ABB=ON PLU=ON BREAST OR MAMMAR?
L70
               QUE ABB=ON PLU=ON PROSTAT?
L71
               QUE ABB=ON
L72
                            PLU=ON TESTIS OR TESTIC?
                                   LUNG
L73
               QUE ABB=ON
                            PLU=ON
               QUE ABB=ON PLU=ON PULMONAR?
L74
               OUE ABB=ON PLU=ON KIDNEY OR RENAL?
L75
L77
            15 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
             6 SEA FILE-HCAPLUS ABB-ON PLU-ON L77 AND (L39 OR L40 OR L41 OR
L78
               L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR
               L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR
               L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR
               L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
               QUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
L79
               QUE ABB=ON PLU=ON MANUFACT?
L80
            14 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L79 OR L80)
L81
            15 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 OR L78 OR L81
L82
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR
L83
               L35 OR L36 OR L37)
                STR
L110
             52 SEA FILE=MARPAT SSS FUL L110
L112
             52 SEA FILE=HCAPLUS ABB=ON PLU=ON L112
L113
             6 SEA FILE=HCAPLUS ABB=ON PLU=ON L113 AND (L32 OR L33 OR L34
L114
               OR L35 OR L36 OR L37)
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON L114 NOT L83
L120
```

#### => d his 1130

(FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, CABA, AGRICOLA, LIFESCI, BIOENG, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONFSCI, DISSABS, WPIX' ENTERED AT 08:53:12 ON 13 APR 2007)

L130 4 S L129 AND L32-L37

<sup>=&</sup>gt; d que 1130

#### 10/574.993

L32	QUE ABB=ON PLU=ON REDDY, E?/AU
L33	QUE ABB=ON PLU=ON REDDY, P?/AU
L34	QUE ABB=ON PLU=ON REDDY, M?/AU
L35	QUE ABB=ON PLU=ON REDDY, R?/AU
L36	QUE ABB=ON PLU=ON BELL, S?/AU
L37	QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W)NOVA)
	)/CS,SO,PA
L123	QUE ABB=ON PLU=ON UNSAT? OR ?ALKENYL?
L124	QUE ABB=ON PLU=ON ?SULFOXID?
L129	438 SEA L123 (5A) L124
L130	4 SEA L129 AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37)

=> dup rem 183 192 196 1108 1120 1126 1130
L126 HAS NO ANSWERS
FILE 'HCAPLUS' ENTERED AT 09:19:16 ON 13 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 09:19:16 ON 13 APR 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'TOXCENTER' ENTERED AT 09:19:16 ON 13 APR 2007 COPYRIGHT (C) 2007 ACS

FILE 'WPIX' ENTERED AT 09:19:16 ON 13 APR 2007
COPYRIGHT (C) 2007 THE THOMSON CORPORATION
PROCESSING COMPLETED FOR L83
PROCESSING COMPLETED FOR L92
PROCESSING COMPLETED FOR L96
PROCESSING COMPLETED FOR L108
PROCESSING COMPLETED FOR L120
PROCESSING COMPLETED FOR L126

L134 8 DUP REM L83 L92 L96 L108 L120 L126 L130 (10 DUPLICATES REMOVED)

ANSWERS '1-6' FROM FILE HCAPLUS

ANSWER '7' FROM FILE USPATFULL

ANSWER '8' FROM FILE WPIX

## => file stnguide

PROCESSING COMPLETED FOR L130

FILE 'STNGUIDE' ENTERED AT 09:19:28 ON 13 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 6, 2007 (20070406/UP).

=> d ibib ed ab hitind hitstr
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX' - CONTINUE? (Y)/N:y

```
L134 ANSWER 1 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 1
ACCESSION NUMBER:
                         2006:884824 HCAPLUS Full-text
DOCUMENT NUMBER:
                         145:292708
                         Synthesis of (E)-\alpha, \beta-unsaturated
TITLE:
                         sulfides, sulfones, sulfoxides and sulfonamides
                         Reddy, M. V. Ramana; Reddy, E.
INVENTOR(S):
                         Premkumar; Bell, Stanley C.
PATENT ASSIGNEE(S):
                         Temple University- Of the Commonwealth
                         System of Higher Education, USA; Onconova
                         Therapeutics Inc.
SOURCE:
                         PCT Int. Appl., 61pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
LANGUAGE:
                         English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                         KIND
                                DATE
                                            APPLICATION NO.
                                                                    DATE
                         ____
                                             _____
     WO 2006091870
                          A2
                                20060831
                                            WO 2006-US6698
                                                                    20060224
     WO 2006091870
                          А3
                                20070118
             AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
             KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
             MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
             SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
             VN, YU, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM
PRIORITY APPLN. INFO.:
                                             US 2005-656204P
                                                                P 20050225
OTHER SOURCE(S):
                         CASREACT 145:292708; MARPAT 145:292708
ED
     Entered STN: 31 Aug 2006
     \alpha,\beta-Unsatd. sulfides, sulfones, sulfoxides and sulfonamides (E)-
     Ar1X(R) SOnCH: CHAr2 (Ar1, Ar2 = aryl, heteroaryl; X = N, CH; n = 0, 1, 2; R =
     H, C1-C8 hydrocarbyl) are prepared by dehydration of \beta-hydroxy sulfides,
     sulfones, sulfoxides or sulfonamides.
CC
     25-12 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
ST
     sulfide unsatd prepn; sulfone unsatd prepn; sulfoxide
     unsatd prepn; sulfonamide unsatd prepn
IT
     Sulfides, preparation
     Sulfonamides
     Sulfones
     Sulfoxides
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (unsatd.; preparation of (E)-\alpha, \beta-unsatd. sulfides,
        sulfones, sulfoxides, and sulfonamides)
IT
     908343-81-7P 908343-83-9P
                                   908343-84-0P
                                                   908343-86-2P
```

2-[(4-Methoxy-3-nitrobenzyl)sulfonyl]-1-(2,4,6-trimethoxyphenyl)ethanone

```
908344-20-7P, 2-[(3-Amino-4-methoxybenzyl)sulfonyl]-1-(2,4,6-
                           908344-22-9P, 2-[(4-Methoxy-3-nitrobenzyl)thio]-
trimethoxyphenyl)ethanol
                                      908344-23-0P
                                                     908344-24-1P
1-(2,4,6-trimethoxyphenyl)ethanone
               908344-26-3P, 2-(Benzylsulfonyl)-1-(4-fluorophenyl)ethanol
908344-25-2P
908344-27-4P, 2-(Benzylsulfonyl)-1-(4-chlorophenyl)ethanol
                                                              908344-28-5P,
2-(Benzylsulfonyl)-1-(4-iodophenyl)ethanol
                                              908344-29-6P
                                                             908344-30-9P
              908344-32-1P
                              908344-33-2P
                                              908344-34-3P,
908344-31-0P
                                                908344-35-4P,
2-(Benzylsulfinyl)-1-(4-fluorophenyl)ethanol
2-(Benzylsulfinyl)-1-(4-chlorophenyl)ethanol
                                                908344-36-5P,
                                              908344-37-6P,
2-(Benzylsulfinyl)-1-(4-iodophenyl)ethanol
                                                           908344-38-7P,
2-[(4-Methoxybenzyl)sulfinyl]-1-(4-chlorophenyl)ethanol
2-[(4-Methoxybenzyl)sulfinyl]-1-phenylethanol
                                                 908344-39-8P,
                                                             908344-40-1P,
2-[(4-Methoxybenzyl)sulfinyl]-1-(4-methoxyphenyl)ethanol
2-[(4-Chlorobenzyl)sulfinyl]-1-(4-chlorophenyl)ethanol
                                                           908344-41-2P,
2-[(4-Chlorobenzyl)sulfinyl]-1-(4-fluorophenyl)ethanol
                                                           908344-42-3P.
2-[(4-Chlorobenzyl)sulfinyl]-1-(4-bromophenyl)ethanol
                                                          908344-43-4P
               908344-45-6P
                               908344-46-7P, 2-[(3-Amino-4-
908344-44-5P
methoxybenzyl)thio]-1-(2,4,6-trimethoxyphenyl)ethanol
                                                          908344-47-8P,
2-[[5-[[[2-Hydroxy-2-(2,4,6-trimethoxyphenyl)ethyl]thio]methyl]-2-
methoxyphenyl]amino]acetic acid 908344-48-9P, 2-(Benzylthio)-1-(4-
                       908344-49-0P, 2-(Benzylthio)-1-(4-
fluorophenyl)ethanol
                       908344-50-3P, 2-(Benzylthio)-1-(4-
chlorophenyl)ethanol
                     908344-51-4P, 2-[(4-Methoxybenzyl)thio]-1-(4-
iodophenyl)ethanol
                       908344-52-5P, 2-[(4-Methoxybenzyl)thio]-1-
chlorophenyl)ethanol
                908344-53-6P, 2-[(4-Methoxybenzyl)thio]-1-(4-
phenylethanol.
                        908344-54-7P, 2-[(4-Chlorobenzyl)thio]-1-(4-
methoxyphenyl) ethanol
                       908344-55-8P, 2-[(4-Chlorobenzyl)thio]-1-(4-
chlorophenyl)ethanol
                       908344-56-9P, 2-[(4-Chlorobenzyl)thio]-1-(4-
fluorophenyl)ethanol
                                      908344-58-1P, 5-[[[2-Hydroxy-2-(2,4,6-
bromophenyl)ethanol
                      908344-57-0P
trimethoxyphenyl)ethyl]sulfonyl]amino]-2-methoxyphenol
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
preparation); PREP (Preparation); RACT (Reactant or reagent)
   (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
   sulfoxides, and sulfonamides)
              118672-28-9P
                              118672-29-0P
                                             155784-75-1P,
93468-07-6P
                                        180524-31-6P 216007-67-9P
(E) - (4-Methoxybenzyl) (styryl) sulfide
, (E)-1-Methoxy-4-[(styrylsulfinyl)methyl]benzene
                                                     222639-33-0P
300699-95-0P
               454479-26-6P
                               592542-50-2P
                                              592542-59-1P
                                                              592542-82-0P
595582-49-3P
                               851799-51-4P 852283-21-7P,
               595582-55-1P
(E) - 5 - [(2,4,6-Trimethoxystyryl)sulfinyl]methyl] - 2 - methoxybenzenamine
\textcolor{red}{\textbf{852283-22-8P}}, \quad \texttt{(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-}
methoxyphenol 852283-27-3P, (E)-2-[[5-[[(2,4,6-
Trimethoxystyryl)sulfinyl|methyl]-2-methoxyphenyl]amino]ethanoic acid
852283-45-5P 852284-78-7P, (E)-1-[[(4-
Chlorostyryl)sulfinyl]methyl]-4-methoxybenzene 852284-85-6P,
1-[(E)-2-(Benzylsulfinyl)ethenyl]-4-chlorobenzene 852284-86-7P,
(E)-1-[[(4-Fluorostyryl)sulfinyl]methyl]-4-chlorobenzene
852284-87-8P, (E)-1-[[(4-Chlorostyryl)sulfinyl]methyl]-4-
                865783-95-5P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]met
chlorobenzene
hyl]-2-methoxyphenol
                        865784-07-2P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenol
                                                     889862-10-6P
               908343-87-3P
                               908343-88-4P
                                              908343-89-5P
                                                              908343-90-8P
908343-82-8P
                                                              908343-95-3P
908343-91-9P
               908343-92-0P
                               908343-93-1P
                                              908343-94-2P
908343-96-4P 908343-98-6P, 1-[(E)-2-(Benzylsulfinyl)ethenyl]-4-
fluorobenzene 908344-00-3P, 1-[(E)-2-(Benzylsulfinyl)ethenyl]-4-
iodobenzene 908344-03-6P, (E)-1-[[(4-
Methoxystyryl)sulfinyl]methyl]-4-methoxybenzene 908344-04-7P,
(E)-1-[[(4-Bromostyryl)sulfinyl]methyl]-4-chlorobenzene
               908344-06-9P, (E)-5-[[(2,4,6-
908344-05-8P
Trimethoxystyryl)thio]methyl]-2-methoxyphenol
                                                  908344-07-0P,
```

IT

```
(E)-2-[[5-[(2,4,6-Trimethoxystyryl)thio]methyl]-2-
                                          908344-08-1P, (E)-5-[[(2,4,6-
     methoxyphenyl]amino]propanoic acid
     Trimethoxystyryl)thio]methyl]-2-methoxybenzenamine
                                                           908344-09-2P.
     (E)-2-[[5-[(2,4,6-Trimethoxystyryl)thio]methyl]-2-
     methoxyphenyl]amino]ethanoic acid
                                          908344-10-5P, (E)-(4-
     Fluorostyryl) (benzyl) sulfide
                                     908344-11-6P, (E)-(4-
     Iodostyryl) (benzyl) sulfide 908344-12-7P, (E)-(4-
     Chlorostyryl) (benzyl) sulfide
                                     908344-13-8P, (E)-(4-Chlorostyryl)(4-
                             908344-14-9P, (E)-(4-Methoxybenzyl)(4-
     methoxybenzyl)sulfide
                             908344-15-0P, (E)-(4-Chlorobenzyl)(4-
     methoxystyryl)sulfide
     chlorostyryl)sulfide .908344-16-1P, (E)-(4-Chlorobenzyl)(4-
     fluorostyryl)sulfide
                            908344-17-2P, (E) -(4-Bromostyryl)(4-
                            908344-18-3P
     chlorobenzyl)sulfide
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
        sulfoxides, and sulfonamides)
IT
                                   462-06-6, Fluorobenzene
     71-43-2, Benzene, reactions
     35543-30-7, 2-Chloro-1-(2,4,6-trimethoxyphenyl)ethanone
                                                                 54109-15-8,
     2-Bromo-1-(2,4,6-trimethoxyphenyl)ethanone 118672-20-1
                                                                 222639-41-0
     300700-06-5
                   675576-48-4
                                 908343-76-0
                                               908343-77-1
                                                              908343-78-2
     908343-79-3
                   908343-80-6
                                  908344-21-8, (4-Methoxy-3-
     nitrophenyl) methanethiol
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
        sulfoxides, and sulfonamides)
                    908343-71-5P
                                   908343-72-6P
                                                   908343-73-7P
                                                                   908343-74-8P
IT
     754999-72-9P
     908343-75-9P
                    908343-85-1P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
        sulfoxides, and sulfonamides)
                    754999-68-3P
                                   754999-69-4P
                                                   754999-70-7P
                                                                   754999-71-8P
IT
     300699-94-9P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
        sulfoxides, and sulfonamides)
IT
     216007-67-9P, (E)-1-Methoxy-4-[(styrylsulfinyl)methyl]benzene
     852283-21-7P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
     methoxybenzenamine 852283-22-8P, (E)-5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenol 852283-27-3P,
     (E)-2-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
     methoxyphenyl]amino]ethanoic acid 852283-45-5P
     852284-78-7P, (E)-1-[[(4-Chlorostyryl)sulfinyl]methyl]-4-
     methoxybenzene 852284-85-6P, 1-[(E)-2-(Benzylsulfinyl)ethenyl]-4-
     chlorobenzene 852284-86-7P, (E)-1-[[(4-
     Fluorostyryl) sulfinyl] methyl] -4-chlorobenzene 852284-87-8P,
     (E)-1-[[(4-Chlorostyryl)sulfinyl]methyl]-4-chlorobenzene
     908343-98-6P, 1-[(E)-2-(Benzylsulfinyl)ethenyl]-4-fluorobenzene
     908344-00-3P, 1-[(E)-2-(Benzylsulfinyl)] ethenyl]-4-iodobenzene
     908344-03-6P, (E)-1-[[(4-Methoxystyryl)sulfinyl]methyl]-4-
     methoxybenzene 908344-04-7P, (E)-1-[[(4-
     Bromostyryl)sulfinyl]methyl]-4-chlorobenzene 908344-05-8P
     RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP
     (Preparation)
        (preparation of (E)-\alpha, \beta-unsatd. sulfides, sulfones,
        sulfoxides, and sulfonamides)
RN
     216007-67-9 HCAPLUS
CN
     Benzene, 1-methoxy-4-[[[(1E)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA
     INDEX NAME)
```

Double bond geometry as shown.

RN 852283-21-7 HCAPLUS

CN Benzenamine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfiny l]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-22-8 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met hyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-27-3 HCAPLUS

CN Glycine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-45-5 HCAPLUS

CN L-Alanine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 852284-78-7 HCAPLUS

CN Benzene, 1-chloro-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-85-6 HCAPLUS

CN Benzene, 1-chloro-4-[(1E)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-86-7 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-87-8 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 908343-98-6 HCAPLUS

CN Benzene, 1-fluoro-4-[(1E)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 908344-00-3 HCAPLUS

CN Benzene, 1-iodo-4-[(1E)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA

INDEX NAME)

Double bond geometry as shown.

RN 908344-03-6 HCAPLUS

CN Benzene, 1-methoxy-4-[[[(1E)-2-(4-methoxyphenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 908344-04-7 HCAPLUS

CN Benzene, 1-bromo-4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 908344-05-8 HCAPLUS

CN Benzeneacetic acid,  $\alpha$ -[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl]sulfinyl]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

=> d ibib ed ab hitind hitstr 2-6
YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX' - CONTINUE? (Y)/N:y

L134 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 2

ACCESSION NUMBER:

2006:678223 HCAPLUS <u>Full-text</u>

DOCUMENT NUMBER:

145:137820

TITLE:

Treatment of <a href="mailto:drug">drug</a>-resistant

proliferative disorders

INVENTOR(S):

Reddy, Ramana M. V.; Reddy, Premkumar E.; Cosenza, Stephen C.; Baker, Stacey J.

PATENT ASSIGNEE(S):

**Temple** University-Of the Commonwealth System

of Higher Education, USA

SOURCE:

PCT Int. Appl., 70 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	ATENT 1	.00			KIND DATE			APPLICATION NO.							DATE		
W	io 2006	0741	49		A2		20060713		Ī	WO 2	006-1	US59			2006010		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KM,	KN,	KP,	KR,
		ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW,	MX,
		MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
		SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,
		VN,	YU,	ZA,	ZM,	zw											
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
		GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
		KG,	ΚZ,	MD,	RU,	ТJ,	TM					•					
PRIORI	IORITY APPLN. INFO.:			.:					1	US 2	005-	6413	78P		P 2	0050	105
OTHER	ER SOURCE(S):				MAR	PAT	145:	1378	2.0								

OTHER SOURCE(S): MA

ED Entered STN: 13 Jul 2006

The invention discloses a method of treating a protein kinase-dependent proliferative disorder, particularly cancer, in an individual, which disorder is resistant to treatment with an ATP-competitive protein kinase inhibitor, said method comprising administering to the individual in need of such treatment an effective amount of at least one compound according to the

10/574,993 formula Ar1XRSOnCH=CHAr2 where Ar1 and Ar2 are independently selected from substituted and unsubstituted aryl and substituted and unsubstituted heteroaryl; X = N or CH; n = 1 or 2; and R = H or (C1-C8) hydrocarbyl. 1-6 (Pharmacology) CC ST drug resistant proliferative disorder treatment IT Drug resistance (antitumor; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Neuroglia, neoplasm (astrocytoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Uterus, neoplasm (carcinoma, papillary serous; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Neoplasm (chordoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) TΤ Eosinophil (disease, hypereosinophilic syndrome; treatment of drug-resistant proliferative disorders . resistant to ATP-competitive protein kinase inhibitors) ΙT Carcinoma (endometrial; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Uterus, neoplasm (endometrium, carcinoma; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Lung, disease (fibrosis; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Neoplasm (fibrous histiocytoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Neuroglia, neoplasm (glioblastoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Blood, disease (hypereosinophilic syndrome; treatment of drug

-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors)

IT Uterus, neoplasm

(leiomyosarcoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors)

ΙT Lymphoma

> (lymphoblastic, acute; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors)

ΙT Brain, neoplasm

(medulloblastoma; treatment of drug-resistant

10/574,993 proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Astrocyte (neoplasm, astrocytoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) ΙŤ Notochord (neoplasm, chordoma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) ΙT Histiocyte (neoplasm, fibrous histiocytoma; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Lung, neoplasm (non-small-cell carcinoma; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Mutation (of protein kinases; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Carcinoma (papillary, uterus; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Disease, animal (proliferative; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) ΙT Carcinoma (pulmonary non-small-cell; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) ΙT Fibrosis (pulmonary; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Antitumor agents (resistance to; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT Digestive tract, neoplasm (stroma; treatment of drug-resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) Mutation IT (substitution, of protein kinases; treatment of drug -resistant proliferative disorders resistant to ATP-competitive protein kinase inhibitors) IT **Antitumor** agents

Chronic myeloid leukemia

Chronic myelomonocytic <u>leukemia</u>

Combination chemotherapy

Drug interactions

Human

Neoplasm

Neuroglia, neoplasm

Prostate gland, neoplasm

(treatment of drug-resistant proliferative

```
disorders resistant to ATP-competitive protein kinase
        inhibitors)
IT
    Myoma
       Sarcoma
        (uterine leiomyosarcoma; treatment of drug
        -resistant proliferative disorders resistant to
        ATP-competitive protein kinase inhibitors)
IT
     Carcinoma
        (uterine, papillary serous; treatment of drug-resistant
       proliferative disorders resistant to ATP-competitive
        protein kinase inhibitors)
IT
     372092-80-3, Protein kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (protein kinase; treatment of drug-resistant
        proliferative disorders resistant to ATP-competitive
        protein kinase inhibitors)
IT
     152459-95-5, Imatinib
                            592542-82-0
     RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological
     activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (treatment of drug-resistant proliferative
        disorders resistant to ATP-competitive protein kinase
        inhibitors)
ΙT
     79079-06-4, Epidermal growth factor receptor kinase
     136396-12-8, Platelet-derived growth factor receptor \beta tyrosine
              138238-67-2, BCR-ABL kinase
                                            138359-29-2, KIT tyrosine kinase
     150027-21-7, Platelet-derived growth factor receptor \alpha tyrosine
     kinase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (treatment of drug-resistant proliferative
        disorders resistant to ATP-competitive protein kinase
        inhibitors)
     152121-47-6, SB203580
                            153436-54-5, PD153035
                                                     183321-74-6, Erlotinib
IT
     184475-35-2, Gefitinib 204005-46-9, SU5416
                                                   252916-29-3, SU6668
     287204-45-9, PD180970 302962-49-8, BMS-354825
                                                        341031-54-7, SU11248
     592542-59-1
                   592543-23-2
                                 592543-24-3
                                               595582-55-1,
     (E)-2,4,6-Trimethoxystyryl-N-(3-carboxymethylamino-4-
                                845895-51-4, AP23464
     methoxyphenyl) sulfonamide
                                                         851799-47-8
                                 851799-51-4 852283-27-3
     851799-49-0
                   851799-50-3
     852283-45-5
                   897013-49-9
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treatment of drug-resistant proliferative
        disorders resistant to ATP-competitive protein kinase
        inhibitors)
IT
     898570-53-1
                  898570-54-2 898570-55-3 898570-56-4
                                                             898570-57-5
     RL: PRP (Properties)
        (unclaimed protein sequence; treatment of drug-resistant
        proliferative disorders)
IT
     852283-27-3 852283-45-5
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (treatment of drug-resistant proliferative
        disorders resistant to ATP-competitive protein kinase
        inhibitors)
     852283-27-3 HCAPLUS
RN
     Glycine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl
     ]methyl]phenyl]- (9CI) (CA INDEX NAME)
```

Double bond geometry as shown.

RN 852283-45-5 HCAPLUS

CN L-Alanine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

L134 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 3

ACCESSION NUMBER:

2005:1049789 HCAPLUS

DOCUMENT NUMBER:

143:346909

TITLE:

Preparation of substituted phenoxy- and

phenylthio- derivatives for treating

proliferative disorders and as

radioprotectants and chemoprotectants

INVENTOR(S):

Reddy, E. Premkumar; Reddy, M. V.

Ramana; Bell, Stanley C.

PATENT ASSIGNEE(S):

Temple University-of the Commonwealth System

Full-text

of Higher Education, USA; Onconova

Therapeutics Inc.

SOURCE:

PCT Int. Appl., 179 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE		1	APPL:	ICAT:	DATE						
						_												
WO	2005	0892	69		A2	2 20050929				WO 2005-US8429						20050315		
WO 2005089269					A3		2006	1214										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE.	GH.	GM.	HR.	HU.	ID.	IL.	IN.	IS.	JP.	KE.	KG.	KP,	KR,	KZ,	LC,	

```
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO. NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM,
             SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
             RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
                                20050929
                                            AU 2005-222947
                                                                    20050315
     AU 2005222947
                          A1
                                20050929
                                            CA 2005-2559187
                                                                    20050315
     CA 2559187
                          A1
                                20070110
                                            EP 2005-736001
                                                                    20050315
                          A2
     EP 1740530
             AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
             HR, LV, MK, YU
                                            US 2004-554008P
                                                                 Р
                                                                    20040316
PRIORITY APPLN. INFO.:
                                            WO 2005-US8429
                                                                 W
                                                                    20050315
                         MARPAT 143:346909
OTHER SOURCE(S):
     Entered STN: 30 Sep 2005
     Title compds. I [A = S, O; R1 = H, haloalkyl, (un)substituted hetero/aryl,
AB
     etc.; Q = hetero/aryl; R2, R3 = independently halo, hydrocarbyl, NO2, CN, OH
     and derivs., P(:O)(OH)2 and derivs., etc.; X = -NRx-Z-, -CH(Rx)Y-; Y = SO,
     SO2; Z = CO, SO2; Rx = H, alkyl, -CO-alkyl; with provisos; and their
     geometrical isomers] were prepared as antiproliferative agents including, for
     example, anticancer agents and as radioprotective and chemoprotective agents.
     For example, reacting 2-[(3-hydroxy-4-methoxybenzyl)sulfonyl]acetic acid with
     2,4,6-Trimethoxybenzaldehyde in the presence of PhCO2H/piperidine/toluene for
     2-3 h at reflux gave II in 62.5% yield.. I displayed antiproliferative
     activity; for II GI50 values = 0.004 \muM, 0.001 \muM, and 0.005 \muM towards Sk-OV-
     3, RF-48, and CEM tumor cell lines, resp.
IC
     ICM A61K
     25-10 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)
CC
     Section cross-reference(s): 1, 63
ST
     phenoxy phenylthio deriv prepn proliferative
     disorder radioprotectant chemoprotectant; unsatd sulfoxide sulfone
     amide prepn neoplasm
IT
     Neoplasm
        (bone marrow; preparation of substituted phenoxy- and phenylthio-
        derivs. for treating proliferative disorders and as
        radioprotectants and chemoprotectants)
ΙT
     Intestine, neoplasm
        (colon; preparation of substituted phenoxy- and phenylthio-
        derivs. for treating proliferative disorders and as
        radioprotectants and chemoprotectants)
IT
     Skin, neoplasm
         (epidermis; preparation of substituted phenoxy- and
        phenylthio- derivs. for treating proliferative
        disorders and as radioprotectants and chemoprotectants)
     Neuroglia, <u>neoplasm</u>
IT
         (glioblastoma; preparation of substituted phenoxy- and phenylthio-
        derivs. for treating proliferative disorders and as
        radioprotectants and chemoprotectants)
     Antibodies and Immunoglobulins
IT
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
         (monoclonal, conjugates, with phenoxy- and phenylthio- derivs.;
        preparation of substituted phenoxy- and phenylthio- derivs. for
        treating proliferative disorders and as
        radioprotectants and chemoprotectants)
IT
     Antitumor agents
     Bone marrow, disease
```

```
Bone marrow, neoplasm
  Brain, neoplasm
Cytoprotective agents
Cytotoxic agents
  Drug delivery systems
  Drug toxicity
Fibroblast
Human
  Ionizing radiation
  Kidney, neoplasm
  Leukemia
  Lung, neoplasm
Lymphoma
  Mammary gland, neoplasm
Melanoma
  Neoplasm
  Ovary, neoplasm
Pancreas, neoplasm
  Prostate gland, neoplasm
Radioprotectants ·
Radiotherapy
  Sarcoma
Stomach, neoplasm
   (preparation of substituted phenoxy- and phenylthio- derivs. for
   treating proliferative disorders and as
   radioprotectants and chemoprotectants)
Antibodies and Immunoglobulins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (preparation of substituted phenoxy- and phenylthio- derivs. for
   treating proliferative disorders and as
   radioprotectants and chemoprotectants)
Intestine, neoplasm
   (rectum, colorectal; preparation of substituted phenoxy-
   and phenylthio- derivs. for treating proliferative
   disorders and as radioprotectants and chemoprotectants)
               865783-97-7P, 2-[(3-Hydroxy-4-methoxybenzyl)sulfanyl]acetic
865783-96-6P
       865783-98-8P, 2-[(3-Hydroxy-4-methoxybenzyl)sulfonyl]acetic acid
865783-99-9P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl dihydrogen phosphate
                                    865784-00-5P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl dibenzyl phosphate
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic
preparation); THU (Therapeutic use); BIOL (Biological study); PREP
(Preparation); RACT (Reactant or reagent); USES (Uses)
    (drug candidate; preparation of substituted phenoxy- and
   phenylthio- derivs. for treating proliferative
   disorders and as radioprotectants and chemoprotectants)
684275-42-1P, (E)-N-(3-Hydroxy-4-methoxyphenyl)-3-(2,4,6-trimethoxyphenyl)-
2-propenamide 852283-22-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl) sulfinyl]methyl]-2-methoxyphenol
                                                     852285-79-1P.
2-[(3-Hydroxy-4-methoxybenzyl)sulfinyl]acetic acid 865783-95-5P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenol
865784-01-6P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl dihydrogen phosphate disodium salt
                                                    865784-02-7P,
(E)-4-[3-[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]propyl]morpholine
                                   865784-03-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-(dimethylamino)acetate
865784-04-9P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 4-methylbenzenesulfonate
                                         865784-05-0P,
 (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxybenzenethiol
```

IT

IT

ΙT

ΙT

```
865784-06-1P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxybenzenethiol
                     865784-07-2P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenol
                                                   865784-08-3P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]amino]-2-methoxybenzenethiol
865784-09-4P, (E)-N-(3-Mercapto-4-methoxyphenyl)-3-(2,4,6-
trimethoxyphenyl)-2-propenamide
                                  865784-10-7P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl dimethyl phosphate
865784-11-8P, (E) -5-[(2,4,6-Trimethoxystyryl) sulfonyl] methyl] <math>-2-
methoxyphenyl diethyl phosphate 865784-12-9P, (E)-S-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl-0,0-dihydrogen
phosphorothioate
                   865784-13-0P, (E) -S-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl-0,0-dimethyl
phosphorothioate
                   865784-14-1P, (E)-(S)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl-0,0-diethyl
                   865784-15-2P, (E)-(S)-5-[[(2,4,6-
phosphorothioate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl-0,0-dibenzyl
phosphorothioate 865784-16-3P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl dihydrogen phosphate
865784-17-4P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl dimethyl phosphate 865784-18-5P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl diethyl
phosphate 865784-19-6P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl dibenzyl phosphate
865784-20-9P, (E)-(S)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenyl-0,0-dihydrogen phosphorothioate 865784-21-0P,
(E)-(S)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl-0,0-
dimethyl phosphorothioate 865784-22-1P, (E)-(S)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl-0,0-diethyl
phosphorothioate 865784-23-2P, (E)-(S)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl-0,0-dibenzyl
phosphorothioate
                   865784-24-3P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl dihydrogen phosphate
865784-25-4P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]amino]-2-
methoxyphenyl dimethyl phosphate 865784-26-5P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl diethyl phosphate
865784-27-6P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]amino] <math>-2-
methoxyphenyl dibenzyl phosphate 865784-28-7P, (E)-(S)-[5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl]-0,0-dihydrogen
phosphorothioate
                   865784-29-8P, (E)-(S)-[5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl]-0,0-dimethyl
phosphorothioate
                   865784-30-1P, (E) -S-[5-[(2,4,6-
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl]-0,0-diethyl
                   865784-31-2P, (E)-(S)-[5-[[(2,4,6-
phosphorothioate
Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl]-0,0-dibenzyl
phosphorothioate
                   865784-32-3P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl dihydrogen
            865784-33-4P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbo
nyl]amino]-2-methoxyphenyl dimethyl phosphate
                                                865784-34-5P,
5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
diethyl phosphate 865784-35-6P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl dibenzyl
            865784-36-7P, S-5-[(E)-3-(2,4,6-Trimethoxyphenyl)acrylamido]-2-
methoxyphenyl-O,O-dihydrogen phosphorothioate
                                                865784-37-8P,
S-5-[(E)-3-(2,4,6-Trimethoxyphenyl)acrylamido]-2-methoxyphenyl-0,0-
                           865784-38-9P, S-5-[(E)-3-(2,4,6-
dimethyl phosphorothicate
Trimethoxyphenyl)acrylamido]-2-methoxyphenyl-0,0-diethyl phosphorothioate
865784-39-0P, S-5-[(E)-3-(2,4,6-Trimethoxyphenyl)acrylamido]-2-
methoxyphenyl-O,O-dibenzyl phosphorothioate
                                              865784-40-3P,
(E)-2-[[5-[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]carbonyl]ethanoic acid 865784-41-4P, (E)-5-[[(2,4,6-
```

```
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 3,5-dinitrobenzoate
865784-42-5P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 3,5-diaminobenzoate
                                    865784-43-6P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-chloroacetate
865784-44-7P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 2-(4-methylpiperazin-1-yl)acetate
                                                 865784-45-8P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl benzoate
865784-46-9P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 4-nitrobenzoate 865784-47-0P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 4-aminobenzoate
865784-48-1P, (E)-(R)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
                                     865784-49-2P, (E)-(R)-5-[[(2,4,6-
methoxyphenyl 2,6-diaminohexanoate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-amino-3-
                    865784-50-5P, (E)-(S)-5-[[(2,4,6-
hydroxypropanoate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-amino-3-
hvdroxvpropanoate
                    865784-51-6P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl carbamate
865784-52-7P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 4-(4-methylpiperazin-1-yl)benzoate
                                                   865784-53-8P.
(E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
2-hydroxyacetate 865784-54-9P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-(pyridinium-1-
vl)acetate
             865784-55-0P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl
]-2-methoxyphenyl 2-acetoxyacetate 865784-56-1P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-hydroxypropanoate
865784-57-2P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl] -2-
methoxyphenyl 2-(triethylammonium)acetate
                                            865784-58-3P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
2-[tris(2-hydroxyethyl)ammonium]acetate
                                          865784-59-4P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
2-hydroxy-2-methylpropanoate
                              865784-60-7P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-acetoxy-2-
                   865784-61-8P, (E) -5-[[(2,4,6-
methylpropanoate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2,2,2-trifluoroacetate
865784-62-9P, (E)-3-[[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]carbonyl]propanoic acid
                                        865784-63-0P,
(E)-5-[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
                               865784-64-1P
3-(chlorocarbonyl)propanoate
                                              865784-65-2P,
(E)-4-[[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]carbonyl]butanoic acid
                                        865784-66-3P,
(E) - [[5-[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]carbonyl]methyl dihydrogen phosphate
                                                      865784-67-4P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl methyl
            865784-68-5P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-
carbonate
                                      865784-69-6P, (E)-5-[[(2,4,6-
2-methoxyphenyl 2-acetoxypropanoate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl methyl succinate
865784-70-9P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl ethyl malonate
                              865784-71-0P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2,2,3,3,3-
                       865784-72-1P, (E) -1-[5-[(2,4,6-
pentafluoropropanoate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl] 3-methyl
                       865784-73-2P, (E)-3-[[5-[[(2,4,6-
2,2-difluoromalonate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenoxy]carbonyl]-2,2,3,3-
tetrafluoropropanoic acid
                           865784-75-4P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-aminoacetate
865784-76-5P, (E)-2-[[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenoxy]carbonyl]-2,2-difluoroethanoic acid
                                                     865784-78-7P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
2-(dimethylamino)-2,2-difluoroacetate 865784-80-1P, 5-[[(2,4,6-
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 2-(dimethylamino)acetate
```

```
865784-81-2P, (E) -2-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenoxy]carbonyl]ethanoic acid 865784-82-3P,
(E) -5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
3,5-dinitrobenzoate 865784-84-5P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 3,5-diaminobenzoate
865784-85-6P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2-chloroacetate 865784-86-7P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-(4-methylpiperazin-1-
yl) acetate 865784-87-8P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl benzoate
865784-88-9P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 4-nitrobenzoate 865784-89-0P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 4-aminobenzoate
865784-90-3P, (E)-(R)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenyl 2,6-diaminohexanoate 865784-91-4P,
(E) - (R) - 5 - [[(2,4,6-Trimethoxystyryl)sulfinyl]methyl] - 2 - methoxyphenyl
2-amino-3-hydroxypropanoate 865784-92-5P 865784-93-6P,
(E) -5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl carbamate
865784-94-7P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2-(dimethylamino)acetate 865784-95-8P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
4-(4-methylpiperazin-1-yl)benzoate 865784-96-9P,
(E) -5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-hydroxyacetate 865784-97-0P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-(pyridinium-1-
yl) acetate 865784-98-1P, (E)-5-[[(2,4,6-1)]
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxyacetate
865784-99-2P 865785-00-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-
(triethylammonium) acetate 865785-01-9P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-[tris(2-
hydroxyethyl) ammonium] acetate 865785-02-0P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-hydroxy-2-
methylpropanoate 865785-03-1P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxy-2-
methylpropanoate 865785-04-2P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2,2,2-trifluoroacetate
\underline{\textbf{865785-05-3P}}, \quad (E) -3 - [[5 - [[(2,4,6 - Trimethoxystyryl)sulfinyl]methyl] - [(2,4,6 - Trimethoxystyryl)sulfinyl]methyl] - [(3,4,6 - Trimethoxystyryl)sulfinyl]methyl] - [(4,4,6 - Trimethoxystyryl)sulfinyl]methyl] - [(5,4,6 - Trimethoxystyryl)sulfinyl]methyll - [(5,4,6 - Trimethoxystyryl)s
2-methoxyphenoxy]carbonyl]propanoic acid 865785-06-4P,
(E) -5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
3-(chlorocarbonyl)propanoate 865785-07-5P 865785-08-6P
, (E)-4-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenoxy]carbonyl]butanoic acid 865785-09-7P,
(E) - [[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenoxy]carbonyl]methyl dihydrogen phosphate 865785-10-0P
, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl methyl
carbonate 865785-11-1P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxypropanoate
865785-12-2P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl methyl succinate 865785-13-3P,
 (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl ethyl
malonate 865785-14-4P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2,2,3,3,3-
pentafluoropropanoate 865785-15-5P, (E)-1-[5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl] 3-methyl
2,2-difluoromalonate 865785-16-6P, (E)-3-[[5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenoxy]carbonyl]-2,2,3,3-
tetrafluoropropanoic acid 865785-17-7P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-aminoacetate
865785-18-8P, (E)-2-[[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
```

```
2-methoxyphenoxy]carbonyl]-2,2-difluoroethanoic acid 865785-19-9P
, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-(dimethylamino)-2,2-difluoroacetate 865785-20-2P,
5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-(dimethylamino)acetate
                           865785-21-3P, 2-[[[5-[[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl]oxy]carbonyl]acet
          865785-22-4P, 5-[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfon
yl]amino]-2-methoxyphenyl 3,5-dinitrobenzoate
                                                865785-23-5P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 3,5-diaminobenzoate
                                    865785-24-6P, 5-[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl 2-chloroacetate
865785-25-7P, 5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-
2-methoxyphenyl 2-(4-methylpiperazin-1-yl)acetate
                                                    865785-26-8P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
                         865785-27-9P, 5-[[[(1E)-2-(2,4,6-
methoxyphenyl benzoate
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl 4-nitrobenzoate
865785-28-0P, 5-[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-
2-methoxyphenyl 4-aminobenzoate
                                865785-29-1P, 5-[[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
(2R)-2,6-diaminohexanoate
                           865785-30-4P, 5-[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
(2R) -2-amino-3-hydroxypropanoate
                                   865785-31-5P, 5-[[(1E)-2-(2,4,6-
Trimethoxyphenyl) ethenyl] sulfonyl] amino] -2-methoxyphenyl
(2S) -2-amino-3-hydroxypropanoate
                                   865785-32-6P, 5-[[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl carbamate
865785-33-7P, 5-[[((1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-
2-methoxyphenyl 2-(dimethylamino)acetate
                                           865785-34-8P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 4-(4-methylpiperazin-1-yl)benzoate
5-[[((1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
                                 865785-36-0P, 5-[[(1E)-2-(2,4,6-
methoxyphenyl 2-hydroxyacetate
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
2-(pyridinium-1-yl)acetate
                             865785-37-1P, 5-[[(1E)-2-(2,4,6-
Trimethoxyphenyl) ethenyl] sulfonyl] amino] -2-methoxyphenyl
                     865785-38-2P, 5-[[(1E)-2-(2,4,6-
2-acetyloxyacetate
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
                      865785-39-3P, 5-[[[(1E)-2-(2,4,6-
2-hydroxypropanoate
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
2-(triethylammonium)acetate
                              865785-40-6P, 5-[[(1E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
2-[tris(2-hydroxyethyl)ammonium]acetate
                                          865785-41-7P,
5-[[((1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 2-hydroxy-2-methylpropanoate
                                             865785-42-8P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 2-acetyloxy-2-methylpropanoate
                                              865785-43-9P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 2,2,2-trifluoroacetate
                                       865785-44-0P, 3-[[[5-[[[(1E)-2-
(2,4,6-Trimethoxyphenyl) ethenyl] sulfonyl] amino] -2-
methoxyphenyl]oxy]carbonyl]propanoic acid
                                            865785-45-1P.
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 3-(chlorocarbonyl)propanoate
                                            865785-46-2P,
3-[[[[[5-[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl]oxy]carbonyl]methyl]oxy]carbonyl]propanoic acid
865785-47-3P, 4-[[5-[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]am
ino]-2-methoxyphenyl]oxy]carbonyl]butanoic acid
                                                  865785-48-4P,
5-[[((1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
                                        865785-49-5P, 5-[[(1E)-2-(2,4,6-
methoxyphenyl 2-(phosphonooxy)acetate
Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl methoxyformate
865785-50-8P, 5-[[((1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-
2-methoxyphenyl 2-acetyloxypropanoate 865785-51-9P, 5-[[(1E)-2-(2,4,6-
```

## 10/574,993

Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl methyl

```
865785-52-0P, 5-[[(1E)-2-(2,4,6-
    butane-1,4-dioate
    Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl ethyl
    propane-1,3-dioate
                         865785-53-1P, 5-[[[(1E)-2-(2,4,6-
    Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl
    2,2,3,3,3-pentafluoropropanoate
                                      865785-54-2P, 5-[[(1E)-2-(2,4,6-
    Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl methyl
    2,2-difluoropropane-1,3-dioate 865785-55-3P, 3-[[[5-[[(1E)-2-(2,4,6-
    Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl]oxy]carbonyl]-
                                        865785-56-4P, 5-[[(1E)-2-(2,4,6-
    2,2,3,3-tetrafluoropropanoic acid
    Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenyl 2-aminoacetate
    865785-57-5P
, 2-[[[5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
    methoxyphenyl]oxy]carbonyl]-2,2-difluoroacetic acid
                                                          865785-58-6P,
    5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
    methoxyphenyl 2-(dimethylamino)-2,2-difluoroacetate
                                                          865785-59-7P.
    5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                         865785-60-0P, 5-[[(E)-2-(2,4,6-
    2-(carboxy)acetate
    Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
    3,5-dinitrobenzoate
                          865785-61-1P, 5-[[(E)-2-(2,4,6-
    Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl 2-chloroacetate
    865785-62-2P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-
    methoxyphenyl 2-(4-methylpiperazin-1-yl)acetate
                                                      865785-63-3P,
    5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
               865785-64-4P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbon
    yl]amino]-2-methoxyphenyl 4-nitrobenzoate
                                                865785-65-5P,
    5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                     865785-67-7P, (R) -5-[[[(E)-2-(2,4,6-
                       865785-66-6P
     4-aminobenzoate
    Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     2-amino-3-hydroxypropanoate
                                  865785-68-8P, (S) -5-[[[(E)-2-(2,4,6-
    Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                  865785-69-9P, 5-[[(E)-2-(2,4,6-
     2-amino-3-hydroxypropanoate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl carbamate
     865785-70-2P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-
     methoxyphenyl 2-(dimethylamino)acetate 865785-71-3P,
     5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                        865785-72-4P, 5-[[[(E)-2-(2,4,6-
     4-(4-methylpiperazin-1-yl)benzoate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl 2-hydroxyacetate
     865785-73-5P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-
     methoxyphenyl 2-(pyridinium-1-yl)acetate
                                               865785-74-6P,
     5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                          865785-75-7P, 5-[[[(E)-2-(2,4,6-
     2-acetyloxyacetate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     2-hydroxypropanoate
                          865785-76-8P, 5-[[(E)-2-(2,4,6-
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     2-(N,N,N-triethylamino)acetate 865785-77-9P
                                                    865785-78-0P,
     5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                   865785-79-1P, 5-[[(E)-2-(2,4,6-
     2-hydroxy-2-methylpropanoate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                   865785-80-4P, 5-[[(E)-2-(2,4,6-
     2-acetoxy-2-methylpropanoate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     2,2,2-trifluoroacetate
                             865785-81-5P, 5-[[(E)-2-(2,4,6-
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     3-carboxypropanoate
                          865785-82-6P, 5-[[(E)-2-(2,4,6-
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                    865785-83-7P
     3-(chlorocarbonyl)propanoate
                                                   865785-84-8P,
     5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                          865785-85-9P, 5-[[[[(E)-2-(2,4,6-
     4-carboxybutanoate
     Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenoxy]carbonyl]methyl
     dihydrogen phosphate
                          865785-86-0P, 5-[[[(E)-2-(2,4,6-
```

```
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl methyl carbonate
865785-87-1P, 5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-
methoxyphenyl 2-acetoxypropanoate
                                    865785-88-2P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl methyl succinate
865785-89-3P, 5-[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-
methoxyphenyl ethyl malonate
                             865785-90-6P, 5-[[[(E)-2-(2,4,6-
Trimethoxyphenyl) ethenyl] carbonyl] amino] -2-methoxyphenyl
                                  865785-91-7P, 1-[5-[[[(E)-2-(2,4,6-
2,2,3,3,3-pentafluoropropanoate
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl] 3-methyl
                       865785-92-8P, 5-[[[(E)-2-(2,4,6-
2,2-difluoromalonate
Trimethoxyphenyl) ethenyl] carbonyl] amino] -2-methoxyphenyl
4-carboxy-2,2,3,3-tetrafluorobutanoate
                                         865785-93-9P,
5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                 865785-94-0P, 5-[[[(E)-2-(2,4,6-
2-aminoacetate
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
2-carboxy-2,2-difluoroacetate
                               865785-95-1P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                                        865785-96-2P, 5-[[(E)-2-(2,4,6-
2-(dimethylamino)-2,2-difluoroacetate
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl acetate
865785-97-3P, 5-[[(2,4,6-Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl
                         865785-98-4P, (E) -5-[[(2,4,6-
2-(dimethylamino)acetate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl carboxymethanesulfonate
865785-99-5P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
methoxyphenyl 2,4-dinitrobenzenesulfonate
                                            865786-00-1P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
                              865786-01-2P, (E) -5-[[(2,4,6-
2,4-diaminobenzenesulfonate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl
                            865786-02-3P, (E) -5-[[(2,4,6-
trifluoromethanesulfonate
Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenyl 4-
methoxybenzenesulfonate 865786-03-4P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl carboxymethanesulfonate
865786-04-5P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2,4-dinitrobenzenesulfonate 865786-05-6P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2,4-diaminobenzenesulfonate 865786-06-7P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
trifluoromethanesulfonate 865786-07-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 4-
methoxybenzenesulfonate 865786-08-9P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 4-methylbenzenesulfonate
865786-09-0P, 2-[[[5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]am
ino]-2-methoxyphenyl]oxy]sulfonyl]acetic acid 865786-10-3P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
                                            865786-11-4P,
methoxyphenyl 2,4-dinitrobenzenesulfonate
5-[[(1E)-2\div(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
                                            865786-12-5P,
methoxyphenyl 2,4-diaminobenzenesulfonate
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl trifluoromethanesulfonate
                                          865786-13-6P,
5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-
methoxyphenyl 4-methoxybenzenesulfonate
                                          865786-14-7P,
5-[[[(E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
carboxymethanesulfonate
                          865786-15-8P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
                            865786-16-9P, 5-[[[(E)-2-(2,4,6-
trifluoromethanesulfonate
Trimethoxyphenyl) ethenyl] carbonyl] amino] -2-methoxyphenyl
2,4-dinitrobenzenesulfonate
                              865786-17-0P, 5-[[[(E)-2-(2,4,6-
Trimethoxyphenyl) ethenyl] carbonyl] amino] -2-methoxyphenyl
2,4-diaminobenzenesulfonate
                              865786-18-1P, 5-[[(E)-2-(2,4,6-
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
 4-methoxybenzenesulfonate
                            865786-19-2P, 5-[[(E)-2-(2,4,6-
```

```
Trimethoxyphenyl)ethenyl]carbonyl]amino]-2-methoxyphenyl
     4-methylbenzenesulfonate 865786-20-5P, (E)-5-[[(2,4,6-
     Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenyl 4-methylbenzenesulfonate
     865786-21-6P, (E)-2-[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
                                    865786-22-7P, (E) -2-[5-[(2,4,6-
    methoxyphenoxy]ethanoic acid
     Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenoxy]propanoic acid
     865786-23-8P, (E)-4-[5-[[(2,4,6-Trimethoxystyryl)sulfonyl]methyl]-2-
    methoxyphenoxy]butanoic acid 865786-24-9P, (E)-3-[5-[[(2,4,6-
    Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenoxy]propanoic acid
     865786-25-0P, (E)-2-[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
     2-methoxyphenoxy]ethanoic acid 865786-26-1P,
     (E)-2-[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
    methoxyphenoxy]propanoic acid 865786-27-2P, (E)-4-[5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenoxy]butanoic acid
     865786-28-3P, (E)-3-[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
     2-methoxyphenoxy]propanoic acid
                                       865786-29-4P, (E) -4-[2-[5-[(2,4,6-
     Trimethoxystyryl)sulfonyl]methyl]-2-methoxyphenoxy]ethyl]morpholine
     865786-30-7P, (E)-4-[2-[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methy
     1]-2-methoxyphenoxy]ethyl]morpholine
                                            865786-31-8P, 2-[5-[[[(1E)-2-(2,4,6-
     Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenoxy]acetic acid
     865786-32-9P, 2-[5-[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amin
     o]-2-methoxyphenoxy]propanoic acid 865786-33-0P, 4-[5-[[(1E)-2-(2,4,6-4)]]
     Trimethoxyphenyl)ethenyl]sulfonyl]amino]-2-methoxyphenoxy]butanoic acid
     865786-34-1P, 3-[5-[[[(1E)-2-(2,4,6-Trimethoxyphenyl)ethenyl]sulfonyl]amin
     o]-2-methoxyphenoxy]propanoic acid
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; preparation of substituted phenoxy- and
        phenylthio- derivs. for treating proliferative
        disorders and as radioprotectants and chemoprotectants)
IT
     865786-35-2P, (E)-N-[3-(Carboxymethoxy)-4-methoxyphenyl]-3-(2,4,6-
     trimethoxyphenyl)-2-propenamide
                                       865786-36-3P, (E)-N-[3-(1-Carboxyethoxy)-
     4-methoxyphenyl]-3-(2,4,6-trimethoxyphenyl)-2-propenamide
                                                                 865786-37-4P,
     (E) - N - [3 - (3 - Carboxypropoxy) - 4 - methoxyphenyl] - 3 - (2, 4, 6 - trimethoxyphenyl) - 2 -
                   865786-38-5P, (E)-N-[3-(2-Carboxyethoxy)-4-methoxyphenyl]-3-
     propenamide
     (2,4,6-trimethoxyphenyl)-2-propenamide
                                              865786-39-6P,
     (E) -N - [3 - [2 - (Morpholino) ethoxy] - 4 - methoxyphenyl] - 3 - (2, 4, 6 - 1)
                                       865786-40-9P, (E) -4-[2-[5-[(2,4,6-
     trimethoxyphenyl)-2-propenamide
     Trimethoxystyryl)sulfonyl]amino]-2-methoxyphenoxy]ethyl]morpholine
     865786-41-0P, 2-[(3-Mercapto-4-methoxybenzyl)sulfinyl]acetic acid
     865786-42-1P, 2-[[3-[(tert-Butyldimethylsilyl)oxy]-4-
     methoxybenzyl]sulfinyl]acetic acid
                                         865786-43-2P, 2-[[3-[(tert-
     Butyldimethylsilyl)sulfanyl]-4-methoxybenzyl]sulfinyl]acetic acid
     865786-44-3P, O-2-Methoxy-5-[[(carboxymethyl)sulfinyl]methyl]phenyl
                            865786-45-4P, O-2-Methoxy-5-
     dihydrogen phosphate
     [[(carboxymethyl)sulfinyl]methyl]phenyl dimethyl phosphate
     O-2-Methoxy-5-[[(carboxymethyl)sulfinyl]methyl]phenyl diethyl phosphate
     865786-47-6P, O-2-Methoxy-5-[[(carboxymethyl)sulfinyl]methyl]phenyl
                          865786-48-7P, S-2-Methoxy-5-
     dibenzyl phosphate
     [[(carboxymethyl)sulfinyl]methyl] phenyl-O,O-dihydrogen phosphorothioate
     865786-49-8P, S-2-Methoxy-5-[[(carboxymethyl)sulfinyl]methyl]phenyl-0,0-
                                865786-50-1P, S-2-Methoxy-5-
     dimethyl phosphorothicate
     [[(carboxymethyl)sulfinyl]methyl]phenyl-O,O-diethyl phosphorothioate
     865786-51-2P, S-2-Methoxy-5-[[(carboxymethyl)sulfinyl]methyl]phenyl-0,0-
     dibenzyl phosphorothioate
                                 865786-52-3P, 2-[(3-Mercapto-4-
     methoxybenzyl)sulfonyl]acetic acid
                                          865786-53-4P, 2-[[3-[(tert-
     Butyldimethylsilyl)oxy]-4-methoxybenzyl]sulfonyl]acetic acid
     865786-54-5P, 2-[[3-[(tert-Butyldimethylsilyl)sulfanyl]-4-
     methoxybenzyl]sulfonyl]acetic acid
                                         865786-55-6P, O-2-Methoxy-5-
```

[[(carboxymethyl)sulfonyl]methyl]phenyl dihydrogen phosphate

```
865786-56-7P, O-2-Methoxy-5-[[(carboxymethyl)sulfonyl]methyl]phenyl
    dimethyl phosphate
                          865786-57-8P, O-[2-Methoxy-5-
     [[(carboxymethyl)sulfonyl]methyl]phenyl] diethyl phosphate
    O-[2-Methoxy-5-[[(carboxymethyl)sulfonyl]methyl]phenyl] dibenzyl phosphate
    865786-59-0P, S-[2-Methoxy-5-[[(carboxymethyl)sulfonyl]methyl]phenyl]
    O,O-dihydrogen phosphorothioate 865786-60-3P, S-[2-Methoxy-5-
     [[(carboxymethyl)sulfonyl]methyl]phenyl] O,O-dimethyl phosphorothioate
    865786-61-4P, S-2-Methoxy-5-[[(carboxymethyl)sulfonyl]methyl]phenyl
    O,O-diethyl phosphorothicate
                                    865786-62-5P, S-2-Methoxy-5-
     [[(carboxymethyl)sulfonyl]methyl]phenyl-0,0-dibenzyl phosphorothioate
    865786-63-6P, O-[2-Methoxy-5-[[(carboxymethyl)sulfanyl]methyl]phenyl]
    dihydrogen phosphate
                            865786-64-7P, O-[2-Methoxy-5-
     [[(carboxymethyl)sulfanyl]methyl]phenyl] dimethyl phosphate
     865786-65-8P, O-2-Methoxy-5-[[(carboxymethyl)sulfanyl]methyl]phenyl
    diethyl phosphate
                         865786-66-9P, O-2-Methoxy-5-
     [[(carboxymethyl)sulfanyl]methyl]phenyl dibenzyl phosphate
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (drug candidate; preparation of substituted phenoxy- and
       phenylthio- derivs. for treating proliferative
        disorders and as radioprotectants and chemoprotectants)
     97315-18-9P, 3-(tert-Butyldimethylsilyloxy)-4-methoxybenzaldehyde
IT
     97315-19-0P, 3-(tert-Butyldimethylsilyloxy)-4-methoxybenzyl alcohol
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of substituted phenoxy- and phenylthio-
        derivs. for treating proliferative disorders and as
        radioprotectants and chemoprotectants)
     621-59-0, 3-Hydroxy-4-methoxybenzaldehyde
                                                 830-79-5, 2,4,6-
IT
     Trimethoxybenzaldehyde
                              18162-48-6, tert-Butyldimethylsilyl chloride
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of substituted phenoxy- and phenylthio- derivs. for
        treating proliferative disorders and as
        radioprotectants and chemoprotectants)
     51-21-8, 5-Fluorouracil
IT
                               57-22-7, Vincristine
                                                       7689-03-4, Camptothecin
     15663-27-1, Cisplatin 23214-92-8, Doxorubicin
                                                        33069-62-4, Paclitaxel
     33419-42-0, Etoposide 65271-80-9, Mitoxantrone
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (use of substituted phenoxy- and phenylthio- derivs. for protecting
        normal human fibroblasts from anticancer agent cytotoxicity)
IT
     \underline{\textbf{852283-22-8P}}, \quad (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
     methoxyphenol 865784-06-1P, (E)-5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxybenzenethiol
     865784-16-3P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
     methoxyphenyl dihydrogen phosphate 865784-17-4P,
     (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl dimethyl
     phosphate 865784-18-5P, (E)-5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl diethyl phosphate
     865784-19-6P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
     methoxyphenyl dibenzyl phosphate 865784-20-9P,
     (E) - (S) - 5 - [[(2,4,6-Trimethoxystyryl)sulfinyl]methyl] - 2-methoxyphenyl - 0,0 -
     dihydrogen phosphorothioate 865784-21-0P, (E)-(S)-5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl-0,0-dimethyl
     phosphorothioate 865784-22-1P, (E)-(S)-5-[[(2,4,6-
     Trimethoxystyryl) sulfinyl]methyl]-2-methoxyphenyl-0,0-diethyl
     phosphorothioate 865784-23-2P, (E)-(S)-5-[[(2,4,6-
     Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl-0,0-dibenzyl
     phosphorothioate 865784-81-2P, (E)-2-[[5-[[(2,4,6-
```

```
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenoxy]carbonyl]ethanoic acid
865784-82-3P, (E) -5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 3,5-dinitrobenzoate 865784-84-5P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
3,5-diaminobenzoate 865784-85-6P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-chloroacetate
865784-86-7P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2-(4-methylpiperazin-1-yl)acetate 865784-87-8P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl benzoate
865784-88-9P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 4-nitrobenzoate 865784-89-0P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 4-aminobenzoate
\textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) - 5 - [[(2,4,6-\text{Trimethoxystyryl}) \, \text{sulfinyl}] \, \text{methyl}] - \\ \textcolor{red}{\textbf{865784-90-3P}}, \quad (E) - (R) 
2-methoxyphenyl 2,6-diaminohexanoate 865784-91-4P,
(E) - (R) - 5 - [[(2,4,6-Trimethoxystyryl)sulfinyl]methyl] - 2 - methoxyphenyl
2-amino-3-hydroxypropanoate 865784-92-5P 865784-93-6P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl carbamate
865784-94-7P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2-(dimethylamino)acetate 865784-95-8P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
4-(4-methylpiperazin-1-yl)benzoate 865784-96-9P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-hydroxyacetate 865784-97-0P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-(pyridinium-1-
yl)acetate 865784-98-1P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxyacetate
865784-99-2P 865785-00-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-
(triethylammonium) acetate 865785-01-9P, (E) -5-[[(2,4,6-4)]
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-[tris(2-
hydroxyethyl) ammonium] acetate 865785-02-0P, (E) -5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-hydroxy-2-
methylpropanoate 865785-03-1P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxy-2-
methylpropanoate 865785-04-2P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2,2,2-trifluoroacetate
865785-05-3P, (E) -3-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenoxy]carbonyl]propanoic acid 865785-06-4P,
 (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
3-(chlorocarbonyl)propanoate 865785-07-5P 865785-08-6P
, (E)-4-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenoxy]carbonyl]butanoic acid 865785-09-7P,
 (E) - [[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenoxy]carbonyl]methyl dihydrogen phosphate 865785-10-0P
 , (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl methyl
carbonate 865785-11-1P, (E)-5-[[(2,4,6-1)]
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-acetoxypropanoate
865785-12-2P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl methyl succinate 865785-13-3P,
 (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl ethyl
malonate 865785-14-4P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2,2,3,3,3-
pentafluoropropanoate 865785-15-5P, (E) -1-[5-[(2,4,6-1)]
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl] 3-methyl
 2,2-difluoromalonate 865785-16-6P, (E)-3-[[5-[[(2,4,6-
 Trimethoxystyryl) sulfinyl]methyl]-2-methoxyphenoxy]carbonyl]-2,2,3,3-
 tetrafluoropropanoic acid 865785-17-7P, (E)-5-[[(2,4,6-
 Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 2-aminoacetate
 865785-18-8P, (E) -2-[[5-[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
 2-methoxyphenoxy]carbonyl]-2,2-difluoroethanoic acid 865785-19-9P
```

## 10/574,993

```
, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-(dimethylamino)-2,2-difluoroacetate 865785-20-2P,
5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2-(dimethylamino)acetate 865786-03-4P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl carboxymethanesulfonate
865786-04-5P, (E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenyl 2,4-dinitrobenzenesulfonate 865786-05-6P,
(E)-5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl
2,4-diaminobenzenesulfonate 865786-06-7P, (E)-5-[[(2,4,6-
Trimethoxystyryl) sulfinyl]methyl]-2-methoxyphenyl
trifluoromethanesulfonate 865786-07-8P, (E)-5-[[(2,4,6-
Trimethoxystyryl) sulfinyl] methyl] -2-methoxyphenyl 4-
methoxybenzenesulfonate 865786-08-9P, (E)-5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenyl 4-methylbenzenesulfonate
865786-25-0P, (E)-2-[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenoxy]ethanoic acid 865786-26-1P,
(E) -2 - [5 - [(2,4,6 - Trimethoxystyryl) sulfinyl] methyl] -2 -
methoxyphenoxy]propanoic acid 865786-27-2P, (E)-4-[5-[[(2,4,6-
Trimethoxystyryl)sulfinyl]methyl]-2-methoxyphenoxy]butanoic acid
865786-28-3P, (E)-3-[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-
2-methoxyphenoxy]propanoic acid 865786-30-7P,
(E)-4-[2-[5-[[(2,4,6-Trimethoxystyryl)sulfinyl]methyl]-2-
methoxyphenoxy]ethyl]morpholine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (drug candidate; preparation of substituted phenoxy- and
   phenylthio- derivs. for treating proliferative
   disorders and as radioprotectants and chemoprotectants)
852283-22-8 HCAPLUS
Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met
hvl]- (9CI)
             (CA INDEX NAME)
```

Double bond geometry as shown.

RN

CN

```
RN 865784-06-1 HCAPLUS
CN Benzenethiol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin
    yl]methyl]- (9CI) (CA INDEX NAME)
```

RN 865784-16-3 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met hyl]-, dihydrogen phosphate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-17-4 HCAPLUS

CN Phosphoric acid, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl dimethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-18-5 HCAPLUS

CN Phosphoric acid, diethyl 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865784-19-6 HCAPLUS

CN Phosphoric acid, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-20-9 HCAPLUS

CN Benzenethiol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]-, dihydrogen phosphate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-21-0 HCAPLUS

CN Phosphorothioic acid, S-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] O,O-dimethyl ester (9CI) (CA INDEX NAME)

RN 865784-22-1 HCAPLUS

CN Phosphorothioic acid, O,O-diethyl S-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-23-2 HCAPLUS

CN Phosphorothioic acid, S-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] O,O-bis(phenylmethyl) ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-81-2 HCAPLUS

CN Propanedioic acid, mono[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX

NAME)

Double bond geometry as shown.

RN 865784-82-3 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]-, 3,5-dinitrobenzoate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-84-5 HCAPLUS

CN Benzoic acid, 3,5-diamino-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$H_2N$$
 $MeO$ 
 $MeO$ 
 $MeO$ 
 $MeO$ 
 $MeO$ 
 $MeO$ 
 $MeO$ 

RN 865784-85-6 HCAPLUS

CN Acetic acid, chloro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-

trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX
NAME)

Double bond geometry as shown.

RN 865784-86-7 HCAPLUS

CN 1-Piperazineacetic acid, 4-methyl-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-87-8 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met hyl]-, benzoate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-88-9 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met

hyl]-, 4-nitrobenzoate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-89-0 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]-, 4-aminobenzoate (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-90-3 HCAPLUS

CN D-Lysine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]m ethyl]phenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 865784-91-4 HCAPLUS

CN D-Serine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 865784-92-5 HCAPLUS

CN L-Serine, 2-methoxy-5-[[((1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 865784-93-6 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]-, carbamate (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 865784-94-7 HCAPLUS

CN Glycine, N,N-dimethyl-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-95-8 HCAPLUS

CN Benzoic acid, 4-(4-methyl-1-piperazinyl)-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-96-9 HCAPLUS

CN Acetic acid, hydroxy-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865784-97-0 HCAPLUS

CN Pyridinium, 1-[2-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]-2-oxoethyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-98-1 HCAPLUS

CN Acetic acid, (acetyloxy)-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865784-99-2 HCAPLUS

CN Propanoic acid, 2-hydroxy-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865785-00-8 HCAPLUS

CN Ethanaminium, N,N,N-triethyl-2-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-01-9 HCAPLUS

CN Ethanaminium, N,N,N-tris(2-hydroxyethyl)-2-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-02-0 HCAPLUS

CN Propanoic acid, 2-hydroxy-2-methyl-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865785-03-1 HCAPLUS

CN Propanoic acid, 2-(acetyloxy)-2-methyl-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-04-2 HCAPLUS

CN Acetic acid, trifluoro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-05-3 HCAPLUS

CN Butanedioic acid, mono[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-06-4 HCAPLUS

CN Butanoic acid, 4-chloro-4-oxo-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-07-5 HCAPLUS

CN Hexanedioic acid, 3-oxo-, 1-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-08-6 HCAPLUS

CN Pentanedioic acid, mono[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX

NAME)

Double bond geometry as shown.

RN 865785-09-7 HCAPLUS

CN Acetic acid, (phosphonooxy)-, 1-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-10-0 HCAPLUS

CN Carbonic acid, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-11-1 HCAPLUS

CN Propanoic acid, 2-(acetyloxy)-, 2-methoxy-5-[[[(1E)-2-(2,4,6-

trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-12-2 HCAPLUS

CN Butanedioic acid, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl methyl ester (9CI) (CAINDEX NAME)

Double bond geometry as shown.

RN 865785-13-3 HCAPLUS

CN Propanedioic acid, ethyl 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865785-14-4 HCAPLUS

CN Propanoic acid, pentafluoro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-15-5 HCAPLUS

CN Propanedioic acid, difluoro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-16-6 HCAPLUS

CN Butanedioic acid, tetrafluoro-, mono[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

RN 865785-17-7 HCAPLUS

CN Glycine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-18-8 HCAPLUS

CN Propanedioic acid, difluoro-, mono[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865785-19-9 HCAPLUS

CN Acetic acid, (dimethylamino)difluoro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

RN 865785-20-2 HCAPLUS

CN Glycine, N,N-dimethyl-, 2-methoxy-5-[[[2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & \\ O - C - CH2 - NMe2 \\ \hline MeO & \\ CH2 - S - CH - CH \\ \hline OMe \\ \hline \end{array}$$

RN 865786-03-4 HCAPLUS

CN Acetic acid, [[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]sulfonyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-04-5 HCAPLUS

CN Benzenesulfonic acid, 2,4-dinitro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-05-6 HCAPLUS

CN Benzenesulfonic acid, 2,4-diamino-, 2-methoxy-5-[[[(1E)-2-(2,4,6-

trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-06-7 HCAPLUS

CN Methanesulfonic acid, trifluoro-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-07-8 HCAPLUS

CN Benzenesulfonic acid, 4-methoxy-, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-08-9 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]-, 4-methylbenzenesulfonate (9CI) (CA INDEX NAME)

RN 865786-25-0 HCAPLUS

CN Acetic acid, [2-methoxy-5-[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenoxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-26-1 HCAPLUS

CN Propanoic acid, 2-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-27-2 HCAPLUS

CN Butanoic acid, 4-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)

RN 865786-28-3 HCAPLUS

CN Propanoic acid, 3-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 865786-30-7 HCAPLUS

CN Morpholine, 4-[2-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenoxy]ethyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L134 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN DUPLICATE 4

ACCESSION NUMBER:

2005:451126 HCAPLUS Full-text

DOCUMENT NUMBER:

143:1247

TITLE:

 $\alpha, \beta$ -Unsaturated sulfoxides for treating

proliferative disorders and as

radioprotective and chemoprotective agents

INVENTOR(S):

Reddy, Premkumar E.; Reddy, Ramana M.

V.; Bell, Stanley C.

PATENT ASSIGNEE(S):

Temple University-of the Commonwealth System

of Higher Education, USA; Onconova

Therapeutics Inc.

SOURCE:

PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PA	PATENT NO.					D	20050526		APPLICATION NO.  WO 2004-US37293								
	-	WO 2005046599 WO 2005046599																
	WO					A3		20051006										
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
								PL,										
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US;	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			AZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CŻ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LU,	MC,	NL,	PL,	PT,	RO,
			SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,
			NE,	SN,	TD,	TG												
	AU 2004289281 CA 2546495				A1	A1 20050526 AU 2004-289281								20041108				
					A1	A1 20050526 CA 2004-2546495								20041108				
EP 1689706			A2	A2 20060816 EP 2004-816944								20041108						
		R:	ΑT,	BE,	CH,	LI,	CY,	BG,	CZ									
	US	2006	2807	46		<b>A</b> 1		2006	1214		US 2	006-	5749	93		2	0060	406
I	PRIORIT	Y APP	LN.	INFO	.:						US 2	003-	5205	23P		P 2	0031	114
					•						WO 2	004-1	US37:	293	1	₩ 2	0041	108
		A				~~~		1 m	2.12	47.	MA D D	7 m 1	42.1	247				

OTHER SOURCE(S):

CASREACT 143:1247; MARPAT 143:1247

Entered STN: 27 May 2005

 $\alpha\beta$ -Unsatd. sulfoxides Ar1[CH(R1)]nS(0)CH=CHAr2 [Ar1, Ar2 = (un)substituted AΒ (hetero)aryl (when Arl and Ar2 are both Ph, at least one of Arl and Ar2 is substituted); n = 0, 1; R1 = H, C1-8 hydrocarbyl, CN, etc.; conformation of substituents on carbon-carbon double bond is E or Z; conformation of substituents on sulfoxide S atom is R-, S- or any mixture of R- and S-; when R1 other than H, conformation of substituents on carbon atom to which R1 is attached is R-, S- or any mixture of R- and S-] are disclosed which are useful as antiproliferative agents including e.g. anticancer agents and as radioprotective and chemoprotective agents. Processes or preg. compds. of the invention are also disclosed.

- IC ICM A61K
- CC 1-6 (Pharmacology)

Section cross-reference(s): 8, 25

- STunsatd sulfoxide prepn proliferative disorder treatment; antitumor radioprotectant chemoprotectant unsatd sulfoxide
- IT Bone, disease

(Paget's;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT **Fibrosis** 

(Peronies and Duputren's fibrosis;

 $\alpha,\beta$ -unsatd. sulfoxides for treatment of

proliferative disorders and as radioprotectants and chemoprotectants)

IT Radioprotectants

(and chemoprotectants;  $\alpha, \beta$ -unsatd. sulfoxides for treatment

of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT Antiarteriosclerotics

(antiatherosclerotics;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of **proliferative** disorders and as radioprotectants and chemoprotectants)

IT Neoplasm

(bone marrow;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT Intestine, neoplasm

 $(\underline{\text{colorectal}}; \alpha, \beta\text{-unsatd. sulfoxides for treatment}$  of  $\underline{\text{proliferative disorders}}$  and as radioprotectants and chemoprotectants)

IT Antibodies and Immunoglobulins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(conjugates, with  $\alpha,\beta$ -unsatd. sulfoxides;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT Disease, animal

(degenerative, chronic progressive myelodegenerative disease;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Disease, animal

(ganglioneuromatosis;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of **proliferative** disorders and as radioprotectants and chemoprotectants)

IT Disease, animal

Newborn

(hemangiomatosis in newborn;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

IT Mitosis

(mitotic phase cell cycle inhibitor;  $\alpha,\beta$ -unsatd. sulfoxides for treatment of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT Antibodies and Immunoglobulins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(monoclonal, conjugates, with  $\alpha, \beta$ -unsatd. sulfoxides;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT Nervous system, neoplasm

(neurofibromatosis type 1;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of **proliferative disorders** and as radioprotectants and chemoprotectants)

IT <u>Lung</u>, <u>neoplasm</u>

(non-small-cell <u>carcinoma</u>;  $\alpha, \beta$ -unsatd. sulfoxides for treatment of <u>proliferative disorders</u> and as radioprotectants and chemoprotectants)

IT <u>Disease</u>, animal

(proliferative;  $\alpha$ ,  $\beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

```
IT
     Carcinoma
         (pulmonary non-small-cell; \alpha, \beta-unsatd. sulfoxides
        for treatment of proliferative disorders and as
        radioprotectants and chemoprotectants)
     Artery, disease
ΙT
         (restenosis; \alpha, \beta-unsatd. sulfoxides for treatment
        of proliferative disorders and as radioprotectants
        and chemoprotectants)
IT
     Multiple sclerosis
         (secondary progressive; \alpha, \beta-unsatd. sulfoxides for treatment
        of proliferative disorders and as radioprotectants
        and chemoprotectants)
IT
     Alkaloids, biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
         (vinca; \alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
         chemoprotectants)
IT
     Antitumor agents
     Apoptosis
       Atherosclerosis
     Bone marrow, neoplasm
       Brain, neoplasm
        Cardiovascular agents
        Cirrhosis
     Cystic fibrosis
     Cytotoxic agents
        Drug delivery systems
        Drug toxicity
     Human
        Ionizing radiation
        Keloid
        Kidney, neoplasm
        Leukemia
        Lung, neoplasm
        Mammary gland, neoplasm
        Neoplasm
     Nervous system agents
        Ovary, neoplasm
      Oxidizing agents
        Prostate gland, neoplasm
      Radiotherapy
        Sarcoidosis
        Skin, neoplasm
        Testis, neoplasm
         (\alpha, \beta-unsatd. sulfoxides for treatment of
         proliferative disorders and as radioprotectants and
         chemoprotectants)
TΨ
      Macrolides
      Taxanes
      RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
         (\alpha, \beta-unsatd. sulfoxides for treatment of
         proliferative disorders and as radioprotectants and
         chemoprotectants)
IT
      Sulfoxides
      RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
      (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
          (\alpha, \beta-unsatd. sulfoxides for treatment of
         proliferative disorders and as radioprotectants and
```

```
chemoprotectants)
     Sulfides, reactions
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (\alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
        chemoprotectants)
IT
     80449-01-0, Topoisomerase
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
         (inhibitors; \alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
        chemoprotectants)
                                                     64-86-8D, Colchicine, derivs.
     57-22-7, Vincristine
                              64-86-8, Colchicine
IT
                                                           33419-42-0, Etoposide
                                 33069-62-4, Paclitaxel
     7689-03-4, Camptothecin
     65271-80-9, Mitoxantrone
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
         (\alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
         chemoprotectants)
     852283-21-7P 852283-22-8P 852283-23-9P
IT
     852283-75-1P 852283-91-1P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
      (Uses)
         (\alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
         chemoprotectants)
IT
     852283-15-9 852283-16-0 852283-17-1
     852283-18-2 852283-19-3 852283-20-6
     852283-24-0 852283-25-1 852283-26-2
     852283-27-3 852283-28-4 852283-29-5
     852283-30-8 852283-31-9 852283-32-0
     852283-33-1 852283-34-2 852283-35-3
     852283-36-4 852283-37-5 852283-38-6
     852283-39-7 852283-40-0 852283-41-1

    852283-42-2
    852283-43-3
    852283-44-4

    852283-46-6
    852283-47-7

      852283-48-8 852283-49-9 852283-50-2
      852283-51-3 852283-52-4 852283-53-5
      852283-54-6 852283-55-7 852283-56-8
      852283-57-9 852283-58-0 852283-59-1
      852283-60-4 852283-61-5 852283-62-6
      852283-63-7 852283-64-8 852283-65-9
      852283-66-0 852283-67-1 852283-68-2
      852283-69-3 852283-70-6 852283-71-7
      852283-72-8 852283-73-9 852283-74-0
      852283-76-2 852283-77-3 852283-78-4
      852283-79-5 852283-80-8 852283-81-9
      852283-82-0 852283-83-1 852283-84-2
      852283-85-3 852283-86-4 852283-87-5
      852283-88-6 852283-89-7 852283-90-0
      852283-92-2 852283-93-3 852283-94-4
      852283-95-5 852283-96-6 852283-97-7
      852283-98-8 852283-99-9 852284-00-5
```

852284-01-6 852284-02-7 852284-03-8 852284-04-9 852284-05-0 852284-06-1 852284-07-2 852284-08-3 852284-09-4 852284-10-7 852284-11-8 852284-12-9 852284-13-0 852284-14-1 852284-15-2 852284-16-3 852284-17-4 852284-18-5

```
852284-19-6 852284-20-9 852284-21-0
852284-22-1 852284-23-2 852284-24-3
852284-25-4 852284-26-5 852284-27-6
852284-28-7 852284-29-8 852284-30-1
852284-31-2 852284-32-3 852284-33-4
852284-34-5 852284-35-6 852284-36-7
852284-37-8 852284-38-9 852284-39-0
852284-40-3 852284-41-4 852284-42-5
852284-43-6 852284-44-7 852284-45-8
852284-46-9 852284-47-0 852284-48-1
852284-49-2 852284-50-5 852284-51-6
<del>852284-52-7</del> <del>852284-53-8</del> <del>852284-54-9</del>
852284-55-0 852284-56-1 852284-57-2
852284-58-3 852284-59-4 852284-60-7
852284-61-8 852284-62-9 852284-63-0
852284-64-1 852284-65-2 852284-66-3
852284-67-4 852284-68-5 852284-69-6
852284-70-9 852284-71-0 852284-72-1
852284-73-2 852284-74-3 852284-75-4
852284-76-5 852284-77-6 852284-78-7
852284-79-8 852284-80-1 852284-81-2
852284-82-3 852284-83-4 852284-84-5
852284-85-6 852284-86-7 852284-87-8
852284-88-9 852284-89-0 852284-90-3
852284-91-4 852284-92-5 852284-93-6
852284-94-7 852284-95-8 852284-96-9
852284-97-0 852284-98-1 852284-99-2
852285-00-8 852285-01-9 852285-02-0
852285-03-1 852285-04-2 852285-05-3
852285-06-4 852285-07-5 852285-08-6
852285-09-7 852285-10-0 852285-11-1
852285-12-2 852285-13-3 852285-14-4
852285-15-5 852285-16-6 852285-17-7
852285-18-8 852285-19-9 852285-20-2
852285-21-3 852285-22-4 852285-23-5
852285-24-6 852285-25-7 852285-26-8
852285-27-9 852285-28-0 852285-29-1
852285-30-4 852285-31-5 852285-32-6
852285-33-7 852285-34-8 852285-35-9
852285-36-0 852285-37-1 852285-38-2
852285-39-3 852285-40-6 852285-41-7
852285-42-8 852285-43-9 852285-44-0
852285-45-1 852285-46-2 852285-47-3
852285-48-4 852285-49-5 852285-50-8
852285-51-9 852285-52-0 852285-53-1
852285-54-2 852285-55-3
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
   (\alpha, \beta-unsatd. sulfoxides for treatment of
  proliferative disorders and as radioprotectants and
   chemoprotectants)
852285-56-4 852285-57-5 852285-58-6
852285-59-7 852285-60-0 852285-61-1
852285-62-2 852285-63-3 852285-64-4
852285-65-5 852285-66-6 852285-67-7
852285-68-8 852285-69-9 852285-70-2
852285-71-3 852285-72-4 852285-73-5
852285-74-6 852285-75-7 852285-76-8
852285-77-9 852285-80-4
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
```

ΙT

(Biological study); USES (Uses)

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of

proliferative disorders and as radioprotectants and chemoprotectants)

68-11-1, Mercaptoacetic acid, reactions IT 104-83-6 619-66-9

824-94-2 830-79-5 6378-19-4 529502-39-4

RL: RCT (Reactant); RACT (Reactant or reagent)

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and

chemoprotectants)

IT 28203-55-6P 125174-87-0P 852285-78-0P 852285-79-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of

proliferative disorders and as radioprotectants and

chemoprotectants)

## 852283-21-7P 852283-22-8P 852283-23-9P IT 852283-75-1P 852283-91-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of

proliferative disorders and as radioprotectants and

chemoprotectants)

RN 852283-21-7 HCAPLUS

Benzenamine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfiny CN l]methyl] - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-22-8 HCAPLUS

CN Phenol, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]met hyl]-(9CI)(CA INDEX NAME)

RN 852283-23-9 HCAPLUS

CN Benzene, 1,3,5-trimethoxy-2-[(1E)-2-[[(4-methoxy-3-nitrophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-75-1 HCAPLUS

CN Benzoic acid, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-91-1 HCAPLUS

CN Benzene, 1,3,5-trimethoxy-2-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]eth enyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

 STT
 852283-15-9
 852283-16-0
 852283-17-1

 852283-18-2
 852283-19-3
 852283-20-6

 852283-24-0
 852283-25-1
 852283-26-2

 852283-30-8
 852283-31-9
 852283-32-0

 852283-33-1
 852283-34-2
 852283-35-3

 852283-36-4
 852283-37-5
 852283-38-6

 852283-39-7
 852283-40-0
 852283-41-1

 852283-42-2
 852283-46-6
 852283-47-7

852283-48-8	852283-49-9	
852283-51-3	852283-52-4	852283-53-5
852283-54-6	852283-55-7	852283-56-8
852283-57-9	852283-58-0	852283-59-1
852283-60-4	852283-61-5	852283-62-6
852283-63-7 052283-66-0	852283-64-8	852283-65-9
852283-66-0 852283-66-0	852283-67-1	852283-68-2
852283-69-3 852283-70-8	<u>852283-70-6</u>	852283-71-7
852283-72-8 852283-76-2	852283-73-9	852283-74-0 852283-74-0
852283-79-5	852283-77-3 852283-80-8	852283-78-4 852283-81-0
852283-82-0	852283-83-1	852283-81-9 852283-84-2
852283-85-3	852283-86-4	852283-87-5
852283-88-6	852283-89-7	852283-90-0
852283-92-2	852283-93-3	852283-94-4
852283-95-5	852283-96-6	852283-97-7
852283-98-8	852283-99-9	852284-00-5
852284-01-6	852284-02-7	852284-03-8
852284-04-9	852284-05-0	852284-06-1
852284-07-2	852284-08-3	852284-09-4
852284-10-7	852284-11-8	852284-12-9
852284-13-0	852284-14-1	852284-15-2
852284-16-3	852284-17-4	852284-18-5
852284-19-6	852284-20-9	852284-21-0
852284-22-1	852284-23-2	852284-24-3
852284-25-4	852284-26-5	852284-27-6
852284-28-7	852284-29-8	852284-30-1
852284-31-2	852284-32-3	852284-33-4
852284-34-5	852284-35-6	<u>852284-36-7</u>
852284-37-8	852284-38-9	852284-39-0
852284-40-3	852284-41-4	852284-42-5
852284-43-6 852284-46-0	852284-44-7 852284-47-0	852284-45-8
852284-46-9	852284-47-0 852284-50-5	852284-48-1
852284-49-2 852284-52-7	852284-50-5 852284-53-8	852284-51-6 852284-51-6
852284-55-0	852284-53-8 852284-56-1	852284-54-9 952284 57 3
852284-58-3	852284-59-4	852284-57-2 852284-60-7
852284-61-8	852284-62-9	852284-63-0
852284-64-1	852284-65-2	852284-66-3
852284-67-4	852284-68-5	
852284-70-9		852284-72-1
852284-73-2		852284-75-4
852284-76-5	852284-77-6	852284-78-7
852284-79-8	852284-80-1	852284-81-2
852284-82-3	852284-83-4	852284-84-5
852284-85-6	852284-86-7	852284-87-8
852284-88-9	852284-89-0	852284-90-3
852284-91-4	852284-92-5	852284-93-6
852284-94-7		852284-96-9
		852284-99-2
852285-00-8		852285-02-0
852285-03-1	852285-04-2	852285-05-3
852285-06-4	852285-07-5	852285-08-6
852285-09-7 852285-12-2	852285-10-0	852285-11-1
852285-12-2 852285-15-5	852285-13-3 852285-16-6	852285-14-4
852285-13-8	852285-16-6 852285-19-9	852285-17-7
852285-21-3	852285-19-9	852285-20-2 852285-23-5
852285-24-6		852285-23-5 852285-26-8
852285-27-9	852285-28-0	852285-29-1
		222203-23-1

```
852285-30-4 852285-31-5 852285-32-6
     852285-33-7 852285-34-8 852285-35-9
     852285-36-0 852285-37-1 852285-38-2
     852285-39-3 852285-40-6 852285-41-7
     852285-42-8 852285-43-9 852285-44-0 85228
     5-45-1 852285-46-2 852285-47-3
     852285-48-4 852285-49-5 852285-50-8
     852285-51-9 852285-52-0 852285-53-1
     852285-54-2 852285-55-3
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\alpha, \beta-unsatd. sulfoxides for treatment of
        proliferative disorders and as radioprotectants and
        chemoprotectants)
     852283-15-9 HCAPLUS
RN
     Naphthalene, 1-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]- (9CI)
CN
     (CA INDEX NAME)
```

Double bond geometry as shown.

RN 852283-17-1 HCAPLUS
CN Naphthalene, 1-[[[(1E)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]- (9CI)
(CA INDEX NAME)

RN 852283-18-2 HCAPLUS

CN Naphthalene, 1-[[[(1E)-2-(2-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-19-3 HCAPLUS

CN Naphthalene, 1-[[[(1E)-2-(3-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-20-6 HCAPLUS

CN Naphthalene, 1-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

RN 852283-24-0 HCAPLUS

CN Acetic acid, [[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulf inyl]methyl]phenyl]amino]sulfonyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-25-1 HCAPLUS

CN Propanoic acid, 3-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-3-oxo-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-26-2 HCAPLUS

CN Guanidine, [2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-27-3 HCAPLUS

CN Glycine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-28-4 HCAPLUS

CN Benzamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]-3,5-dinitro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-29-5 HCAPLUS

CN Benzamide, 3,5-diamino-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-30-8 HCAPLUS

CN Acetamide, 2-chloro-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-31-9 HCAPLUS

CN 1-Piperazineacetamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-4-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-32-0 HCAPLUS

CN Benzamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-33-1 HCAPLUS

CN Benzamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]-4-nitro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-34-2 HCAPLUS

CN Benzamide, 4-amino-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-35-3 HCAPLUS

CN Benzenamine, 2-methoxy-N-[(4-nitrophenyl)methylene]-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]-, [N(Z)]- (9CI) (CA INDEX NAME)

RN 852283-36-4 HCAPLUS

CN Hexanamide, 2,6-diamino-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 852283-37-5 HCAPLUS

CN Propanamide, 2-amino-3-hydroxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 852283-38-6 HCAPLUS

CN Propanamide, 2-amino-3-hydroxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-

trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 852283-39-7 HCAPLUS

CN Urea, [2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]meth yl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-40-0 HCAPLUS

CN Benzenamine, 2-methoxy-N-methyl-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-41-1 HCAPLUS

CN Acetamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin

yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-42-2 HCAPLUS

CN Benzenesulfonamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-2,4-dinitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-43-3 HCAPLUS

CN Benzenesulfonamide, 2,4-diamino-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c} \text{MeO} \\ \\ \text{OMe} \\ \\ \text{OMe} \\ \\ \text{OMe} \\ \\ \text{OMe} \\ \\ \text{NH}_2 \\ \\ \text{NH}_2 \\ \\ \text{OMe} \\ \\ \text{NH}_2 \\ \\ \text{OMe} \\ \\ \text{NH}_2 \\ \\ \text{NH}_$$

RN 852283-44-4 HCAPLUS

CN Acetamide, 2-(dimethylamino)-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-45-5 HCAPLUS

CN L-Alanine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 852283-46-6 HCAPLUS

CN Benzamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]-4-(4-methyl-1-piperazinyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-47-7 HCAPLUS

CN Acetamide, 2-hydroxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-48-8 HCAPLUS

CN 2-Pyridineacetamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-49-9 HCAPLUS

CN Acetamide, 2-(acetyloxy)-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-50-2 HCAPLUS

CN Propanamide, 2-hydroxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-51-3 HCAPLUS

CN Ethanaminium, N,N,N-triethyl-2-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-52-4 HCAPLUS

CN Ethanaminium, N,N,N-tris(2-hydroxyethyl)-2-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-2-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-53-5 HCAPLUS

CN Propanamide, 2-hydroxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]-2-methyl- (9CI) (CA INDEX NAME)

RN 852283-54-6 HCAPLUS

CN Butanamide, 2-(acetyloxy)-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-55-7 HCAPLUS

CN Acetamide, 2,2,2-trifluoro-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-56-8 HCAPLUS

CN Methanesulfonamide, 1,1,1-trifluoro-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-57-9 HCAPLUS

CN  $\beta$ -Alanine, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-58-0 HCAPLUS

CN Propanoyl chloride, 3-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-59-1 HCAPLUS

CN Butanedioic acid, mono[2-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-2-oxoethyl] ester (9CI) (CA INDEX NAME)

RN 852283-60-4 HCAPLUS

CN Pentanoic acid, 5-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-5-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-61-5 HCAPLUS

CN Acetamide, N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfin yl]methyl]phenyl]-2-(phosphonooxy)- (9CI) (CA:INDEX NAME)

Double bond geometry as shown.

RN 852283-62-6 HCAPLUS

CN Butanoic acid, 4-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]- (9CI) (CA INDEX NAME)

RN 852283-63-7 HCAPLUS

CN Carbamic acid, [2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulf inyl]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-64-8 HCAPLUS

CN Benzenesulfonamide, 4-methoxy-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-65-9 HCAPLUS

CN Propanamide, 3-(acetyloxy)-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-66-0 HCAPLUS

CN Butanoic acid, 4-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-4-oxo-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-67-1 HCAPLUS

CN Propanoic acid, 3-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-3-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-68-2 HCAPLUS

CN Propanamide, 2,2,3,3,3-pentafluoro-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-69-3 HCAPLUS

CN Propanoic acid, 2,2-difluoro-3-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl]sulfinyl]methyl]phenyl]amino]-3-oxo-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-70-6 HCAPLUS

CN Butanoic acid, 2,2,3,3-tetrafluoro-4-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-71-7 HCAPLUS

CN Acetamide, 2-amino-N-[2-methoxy-5-[[[(1E)- $\acute{2}$ -(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

RN 852283-72-8 HCAPLUS

CN Propanoic acid, 2,2-difluoro-3-[[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-3-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-73-9 HCAPLUS

CN Acetamide, 2-(dimethylamino)-2,2-difluoro-N-[2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-74-0 HCAPLUS

CN Benzoic acid, 4-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852283-76-2 HCAPLUS

CN Ethanone, 1-[5-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2-fluorophenyl]-2-(dimethylamino)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-77-3 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-2,4-difluoro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-78-4 HCAPLUS

CN Benzenamine, 5-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2-fluoro-(9CI) (CA INDEX NAME)

RN 852283-79-5 HCAPLUS

CN Benzene, pentafluoro[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-80-8 HCAPLUS

CN Benzene, [(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]pentafluoro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$F \longrightarrow F \longrightarrow F$$

RN 852283-81-9 HCAPLUS

CN Benzene, [(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]pentafluoro-(9CI) (CA INDEX NAME)

RN 852283-82-0 HCAPLUS

CN Benzene, pentafluoro[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-83-1 HCAPLUS

CN Benzene, [[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl]pentafluoro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-84-2 HCAPLUS

CN Benzene, [[[(1E)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]pentafluoro-(9CI) (CA INDEX NAME)

RN 852283-85-3 HCAPLUS

CN Benzene, [(1E)-2-[[(3,4-dichlorophenyl)methyl]sulfinyl]ethenyl]pentafluoro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$F \qquad \qquad F \qquad \qquad C1 $

RN 852283-86-4 HCAPLUS

CN Benzene, pentafluoro[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-87-5 HCAPLUS

CN Phenol, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-4,6-dinitro-(9CI) (CA INDEX NAME)

RN 852283-88-6 HCAPLUS

CN Phenol, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-4,6-dinitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-89-7 HCAPLUS

CN Phenol, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-4,6-dinitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-90-0 HCAPLUS

CN Phenol, 2-[(1E)-2-[[(2,4-dichlorophenyl)methyl]sulfinyl]ethenyl]-4,6-dinitro- (9CI) (CA INDEX NAME)

$$O_2N$$
 $E$ 
 $O_1$ 
 $O_2$ 
 $O_2$ 
 $O_3$ 
 $O_4$ 
 $O_5$ 
 RN 852283-92-2 HCAPLUS

CN Benzene, 1,3-dimethoxy-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]etheny 1]-2-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-93-3 HCAPLUS

CN Benzene, 1,2,3-trimethoxy-5-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]eth enyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-94-4 HCAPLUS

CN Benzene, 5-[(1E)-2-[[(4,5-dimethoxy-2-nitrophenyl)methyl]sulfinyl]ethenyl]-1,2,3-trimethoxy-(9CI) (CA INDEX NAME)

RN 852283-95-5 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4,5-dimethoxy-2-nitrophenyl)methyl]sulfinyl]ethenyl]-1,3,5-trimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-96-6 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4,5-dimethoxy-2-nitrophenyl)methyl]sulfinyl]ethenyl]-2,4-dimethoxy-3-methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-97-7 HCAPLUS

CN Benzene, 1,2,3-trifluoro-4-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethen yl]- (9CI) (CA INDEX NAME)

RN 852283-98-8 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2,3,4-trifluoro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852283-99-9 HCAPLUS

CN Phenol, 3,5-dimethoxy-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl ]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-00-5 HCAPLUS

CN Benzene, 1,2,4,5-tetrafluoro-3-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl] ethenyl]- (9CI) (CA INDEX NAME)

RN 852284-01-6 HCAPLUS

CN Benzene, 1,2,4-trimethoxy-5-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]eth enyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-02-7 HCAPLUS

CN Benzene, 1,2,3-trimethoxy-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]eth enyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-03-8 HCAPLUS

CN Phenol, 2-methoxy-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-6-nitro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-04-9 HCAPLUS

CN Benzene, 1,2-dimethoxy-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]etheny l]-5-nitro- (9CI) (CA INDEX NAME)

RN 852284-05-0 HCAPLUS

CN Benzene, 1-iodo-2,3-dimethoxy-5-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-06-1 HCAPLUS

CN Benzene, 5-fluoro-1,3-dimethoxy-2-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-07-2 HCAPLUS

CN Phenol, 3,5-dimethoxy-2-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl ]- (9CI) (CA INDEX NAME)

RN 852284-08-3 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-1,3,5-trimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-09-4 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-1,3,5-trimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-10-7 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-5-fluoro-1,3-dimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-11-8 HCAPLUS

CN Phenol, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-3,5-dimethoxy-(9CI) (CA INDEX NAME)

RN 852284-12-9 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-1,3,5-trimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-13-0 HCAPLUS

CN Benzene, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-5-fluoro-1,3-dimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-14-1 HCAPLUS

CN Benzene, 1,3,5-trimethoxy-2-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulf inyl]methyl]- (9CI) (CA INDEX NAME)

RN 852284-15-2 HCAPLUS

CN Benzene, 1-[[[(1E)-2-(2,6-dimethoxyphenyl)ethenyl]sulfinyl]methyl]-2,3,4-trimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-16-3 HCAPLUS

CN Benzene, 1,2,3-trimethoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulf inyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-17-4 HCAPLUS

CN Benzene, 5-[[[(1E)-2-(2,6-dimethoxyphenyl)ethenyl]sulfinyl]methyl]-1,2,3-trimethoxy- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-18-5 HCAPLUS

CN Benzene, 5-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-1,2,3-trimethoxy- (9CI) (CA INDEX NAME)

RN 852284-19-6 HCAPLUS

CN Benzene, 1-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-20-9 HCAPLUS

CN Benzene, 1-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-21-0 HCAPLUS

CN Benzene, 1-[[[(1E)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 852284-22-1 HCAPLUS

CN Benzene, 2,4-dichloro-1-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\mathbb{F} \stackrel{\circ}{\longrightarrow} \mathbb{C}_1$$

RN 852284-23-2 HCAPLUS

CN Benzene, 2,4-dichloro-1-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

RN 852284-24-3 HCAPLUS

CN Benzene, 1,2-dichloro-4-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{bmatrix} & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & \\ & & \\ & \\ & & \\ &$$

RN 852284-25-4 HCAPLUS

CN Benzene, 1,2-dichloro-4-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

RN 852284-26-5 HCAPLUS

CN Benzene, 4-[[[(1E)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]-1,2-dichloro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-27-6 HCAPLUS

CN Benzene, 1-fluoro-4-[(1E)-2-[[(4-nitrophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-28-7 HCAPLUS

CN Benzonitrile, 4-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852284-29-8 HCAPLUS

CN Benzonitrile, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-30-1 HCAPLUS

CN Benzonitrile, 4-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-31-2 HCAPLUS

CN Benzene, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-1,2-difluoro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-32-3 HCAPLUS

CN Benzene, 2-chloro-4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-1-fluoro- (9CI) (CA INDEX NAME)

RN 852284-33-4 HCAPLUS

CN Benzene, 2-chloro-1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-4-fluoro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-34-5 HCAPLUS

CN Benzene, 2,4-dichloro-1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-35-6 HCAPLUS

CN Benzene, 1,2-dichloro-4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852284-36-7 HCAPLUS

CN Benzene, 1,2-dichloro-3-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-37-8 HCAPLUS

CN Benzene, 1-fluoro-4-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-38-9 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1E)-2-(4-iodophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-39-0 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-iodophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

$$\mathbb{E} \quad \mathbb{Q} \quad \mathbb{C}_{1}$$

RN 852284-40-3 HCAPLUS

CN Benzene, 1-bromo-4-[[[(1E)-2-(4-iodophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-41-4 HCAPLUS

CN Benzene, 1-bromo-4-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-42-5 HCAPLUS

CN Benzene, 1-bromo-4-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852284-43-6 HCAPLUS

CN Benzene, 1-iodo-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-44-7 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]-2-nitro- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-45-8 HCAPLUS

CN Benzene, 1-iodo-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-46-9 HCAPLUS

CN Benzene, 2,4-dichloro-1-[[[(1E)-2-(4-iodophenyl)ethenyl]sulfinyl]methyl]-. (9CI) (CA INDEX NAME)

RN 852284-47-0 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-48-1 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-3-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-49-2 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-50-5 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-2-

(trifluoromethyl) - (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-51-6 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-52-7 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\mathbb{F}_{3}\mathbb{C}$$

RN 852284-53-8 HCAPLUS

CN Benzene, 4-fluoro-1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 852284-54-9 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-55-0 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-3-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-56-1 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-57-2 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 852284-58-3 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-3-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-59-4 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-60-7 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-4-fluoro-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-61-8 HCAPLUS

CN Benzene, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-1-fluoro-2-

methyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-62-9 HCAPLUS

CN Benzene, 2,4-dichloro-1-[[[(1E)-2-(2-nitrophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-63-0 HCAPLUS

CN Benzene, 2,4-dichloro-1-[[[(1E)-2-[4-fluoro-2-(trifluoromethyl)phenyl]ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-64-1 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

RN 852284-65-2 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-3-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-66-3 HCAPLUS

CN Benzene, 1-bromo-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-67-4 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-2-(trifluoromethyl)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-68-5 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-4-(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 852284-69-6 HCAPLUS

CN Benzonitrile, 4-[[[(1E)-2-(2-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-70-9 HCAPLUS

CN Benzonitrile, 4-[[[(1E)-2-(3-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-71-0 HCAPLUS

CN Benzonitrile, 4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-72-1 HCAPLUS

CN Benzene, 1-fluoro-4-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]-

(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-73-2 HCAPLUS

CN Benzene, 1-bromo-4-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-74-3 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-75-4 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]-3-nitro-(9CI) (CA INDEX NAME)

RN 852284-76-5 HCAPLUS

CN Benzene, 1-methyl-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-77-6 HCAPLUS

CN Benzene, 1-fluoro-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-78-7 HCAPLUS

CN Benzene, 1-chloro-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-79-8 HCAPLUS

CN Benzene, 1-bromo-4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852284-80-1 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-81-2 HCAPLUS

CN Benzene, 1-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-3-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-82-3 HCAPLUS

CN Benzene, 1-methoxy-4-[[[(1E)-2-(4-nitrophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-83-4 HCAPLUS

CN Benzene, 1-chloro-4-[(1E)-2-[[(4-nitrophenyl)methyl]sulfinyl]ethenyl]-

(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-84-5 HCAPLUS

CN Benzene, 1-chloro-2-[(1E)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c|c}
C1 & E & \emptyset \\
\hline
Ph
\end{array}$$

RN 852284-85-6 HCAPLUS

CN Benzene, 1-chloro-4-[(1E)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-86-7 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

RN 852284-87-8 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1E)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-88-9 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-89-0 HCAPLUS

CN Benzene, 2,4-difluoro-1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-90-3 HCAPLUS

CN Benzene, 1-bromo-4-[[[(1E)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

RN 852284-91-4 HCAPLUS

CN Benzene, 1-bromo-4-[[[(1E)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-92-5 HCAPLUS

CN Benzene, 1-bromo-4-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\mathbb{B}_{\mathbf{r}} \stackrel{\circ}{ } \mathbb{I}$$

RN 852284-93-6 HCAPLUS

CN Benzene, [[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-94-7 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-95-8 HCAPLUS

CN Benzene, 1-chloro-2-[[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-96-9 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1Z)-2-phenylethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-97-0 HCAPLUS

CN Benzene, 1-chloro-4-[(1Z)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852284-98-1 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1Z)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

$$C1$$
  $C1$   $C1$ 

RN 852284-99-2 HCAPLUS

CN Benzene, 1-chloro-2-[[[(1Z)-2-(4-chlorophenyl)ethenyl]sulfinyl]methyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-00-8 HCAPLUS

CN Benzene, 1-chloro-4-[(1Z)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-01-9 HCAPLUS

CN Benzene, 1-fluoro-4-[(1Z)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$rac{\overline{Z}}{\overline{Z}}$$
 S  $rac{Ph}{\overline{Z}}$ 

RN 852285-02-0 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1Z)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ \hline \end{array}$$

RN 852285-03-1 HCAPLUS

CN Benzene, 1-chloro-2-[[[(1Z)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c|c} F & & \\ \hline & Z & \\ \hline \end{array}$$

RN 852285-04-2 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1Z)-2-(4-fluorophenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c|c} F & O & F \\ \hline & Z & S & \end{array}$$

RN 852285-05-3 HCAPLUS

CN Benzene, 1-bromo-4-[(1Z)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$Br$$
  $S$   $Ph$ 

RN 852285-06-4 HCAPLUS

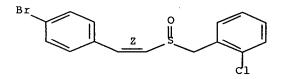
CN Benzene, 1-bromo-4-[(1Z)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-07-5 HCAPLUS

CN Benzene, 1-[[[(1Z)-2-(4-bromophenyl)ethenyl]sulfinyl]methyl]-2-chloro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 852285-08-6 HCAPLUS

CN Benzene, 1-bromo-4-[(1Z)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-09-7 HCAPLUS

CN Benzene, 1-methyl-4-[(1Z)-2-[(phenylmethyl)sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-10-0 HCAPLUS

CN Benzene, 1-chloro-4-[[[(1Z)-2-(4-methylphenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-11-1 HCAPLUS

CN Benzene, 1-chloro-2-[[[(1Z)-2-(4-methylphenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

$$\stackrel{\mathsf{Me}}{\overbrace{\hspace{1cm}}} \stackrel{\circ}{\underbrace{\hspace{1cm}}} \stackrel{\circ}{\underbrace{\hspace$$

RN 852285-12-2 HCAPLUS

CN Benzene, 1-fluoro-4-[[[(1Z)-2-(4-methylphenyl)ethenyl]sulfinyl]methyl]-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-13-3 HCAPLUS

CN Benzene, 1-fluoro-4-[(1Z)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-14-4 HCAPLUS

CN Pyridine, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-15-5 HCAPLUS

CN Pyridine, 3-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852285-16-6 HCAPLUS

CN Pyridine, 4-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-17-7 HCAPLUS

CN Pyridine, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-18-8 HCAPLUS

CN Pyridine, 3-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-19-9 HCAPLUS

CN Pyridine, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-20-2 HCAPLUS

CN Pyridine, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-21-3 HCAPLUS

CN Pyridine, 3-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-22-4 HCAPLUS

CN Pyridine, 4-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-23-5 HCAPLUS

CN Thiophene, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI)

(CA INDEX NAME)

Double bond geometry as shown.

RN 852285-24-6 HCAPLUS

CN Thiophene, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-25-7 HCAPLUS

CN Thiophene, 4-bromo-2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-26-8 HCAPLUS

CN Thiophene, 2-bromo-5-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852285-27-9 HCAPLUS

CN Thiophene, 2-bromo-5-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\mathsf{Br} = \mathsf{S} = \mathsf{P} \mathsf{C1}$$

RN 852285-28-0 HCAPLUS

CN Thiophene, 2-bromo-5-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-29-1 HCAPLUS

CN Thiophene, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-30-4 HCAPLUS

CN Thiophene, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 852285-31-5 HCAPLUS
CN Thiophene, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-,
1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-32-6 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

RN 852285-33-7 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

RN 852285-34-8 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CF INDEX NAME)

RN 852285-35-9 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CF INDEX NAME)

Double bond geometry as shown.

RN 852285-36-0 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

RN 852285-37-1 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI)
(CA INDEX NAME)

RN 852285-38-2 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[[4-(trifluoromethyl)phenyl]methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-39-3 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(2,4-dichlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-40-6 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(3,4-dichlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-41-7 HCAPLUS

CN Benzonitrile, 4-[[[(1E)-2-(3-thienyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

RN 852285-42-8 HCAPLUS
CN Thiophene, 3-[(1E)-2-[[(4-nitrophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA

Double bond geometry as shown.

RN 852285-43-9 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-44-0 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

RN 852285-45-1 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-46-2 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-47-3 HCAPLUS

CN Thiophene, 3-[(1E)-2-[[(2,4-dichlorophenyl)methyl]sulfinyl]ethenyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-48-4 HCAPLUS

CN Furan, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852285-49-5 HCAPLUS

CN Furan, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-50-8 HCAPLUS

CN Furan, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-51-9 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-52-0 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA

INDEX NAME)

Double bond geometry as shown.

RN 852285-53-1 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-54-2 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-55-3 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-methylphenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

```
IT
     852285-56-4 852285-57-5 852285-58-6
     852285-59-7 852285-60-0 852285-61-1
     852285-62-2 852285-63-3 852285-64-4
     852285-65-5 852285-66-6 852285-67-7
     852285-68-8 852285-69-9 852285-70-2
     852285-71-3 852285-72-4 852285-73-5
     852285-74-6 852285-75-7 852285-76-8
     852285-77-9 852285-80-4
     RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (\alpha,\beta\text{-unsatd. sulfoxides for treatment of}
        proliferative disorders and as radioprotectants and
        chemoprotectants)
RN
     852285-56-4 HCAPLUS
     Furan, 3-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]- (9CI)
CN
     INDEX NAME)
```

Double bond geometry as shown.

RN 852285-57-5 HCAPLUS
CN Furan, 3-[(1E)-2-[[[4-(trifluoromethyl)phenyl]methyl]sulfinyl]ethenyl](9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-58-6 HCAPLUS
CN Furan, 3-[(1E)-2-[[(2,4-dichlorophenyl)methyl]sulfinyl]ethenyl]- (9CI)
(CA INDEX NAME)

Double bond geometry as shown.

RN 852285-59-7 HCAPLUS

CN Furan, 3-[(1E)-2-[[(3,4-dichlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-60-0 HCAPLUS

CN Benzonitrile, 4-[[[(1E)-2-(3-furanyl)ethenyl]sulfinyl]methyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-61-1 HCAPLUS

CN Furan, 3-[(1E)-2-[[(4-nitrophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852285-62-2 HCAPLUS

CN Thiazole, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX: NAME)

Double bond geometry as shown.

RN 852285-63-3 HCAPLUS

CN 1H-Pyrrole, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-64-4 HCAPLUS

CN 1H-Pyrrole, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-65-5 HCAPLUS

CN Thiophene, 4-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-66-6 HCAPLUS

CN Thiophene, 4-[(1E)-2-[[(4-iodophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-67-7 HCAPLUS

CN Thiophene, 4-[(1E)-2-[[(2,4-dichlorophenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-68-8 HCAPLUS

CN Thiophene, 4-[(1E)-2-[[(4-methoxyphenyl)methyl]sulfinyl]ethenyl]-2-nitro-(9CI) (CA INDEX NAME)

RN 852285-69-9 HCAPLUS

CN Naphthalene, 1-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-70-2 HCAPLUS

CN Naphthalene, 2-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-71-3 HCAPLUS

CN Naphthalene, 1-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-72-4 HCAPLUS

CN Naphthalene, 2-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN 852285-73-5 HCAPLUS

CN Naphthalene, 1-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-74-6 HCAPLUS

CN Naphthalene, 2-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-75-7 HCAPLUS

CN Anthracene, 9-[(1E)-2-[[(4-fluorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

RN852285-76-8 HCAPLUS

CN Anthracene, 9-[(1E)-2-[[(4-chlorophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-77-9 HCAPLUS

CN Anthracene, 9-[(1E)-2-[[(4-bromophenyl)methyl]sulfinyl]ethenyl]- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

RN 852285-80-4 HCAPLUS

CN Butanoic acid, 4-[[2-methoxy-5-[[[(1E)-2-(2,4,6trimethoxyphenyl)ethenyl]sulfinyl]methyl]phenyl]amino]-4-oxo- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

L134 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:638614 HCAPLUS Full-text

DOCUMENT NUMBER:

143:149136

TITLE:

Protection of tissues and cells from cytotoxic effects

of ionizing radiation by ABL inhibitors

INVENTOR(S):

Reddy, E. Premkumar; Reddy, M. V.

Ramana; Cosenza, Stephen C.; Gumireddy, Kiranmai

PATENT ASSIGNEE(S):

Temple University of the Commonwealth System

of Higher Education, USA

SOURCE:

PCT Int. Appl., 151 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	ENT 1	NO.			KIN	D	DATE		1	APPL	ICAT	ION :	NO.		D.	ATE	
		0650 0650	-		A2		2005		1	WO 2	004-	US28	654		2	0040	902
WO A	2005				A3		2006										
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
																NA,	
	:	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
,		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	ΡĹ,	PT,	RO,	SE,
																MR,	
			TD,											•	•	•	•

PRIORITY APPLN. INFO.:

US 2003-501783P P 20030909

OTHER SOURCE(S):

ED

MARPAT 143:149136 Entered STN: 22 Jul 2005

Pre-treatment with ABL protein kinase inhibitors protects normal cells from AR the toxic side effects of ionizing radiation. Administration of one or more radioprotectant to a patient prior to anticancer radiotherapy reduces the cytotoxic side effects of the radiation on normal cells. The radioprotective effect allows for safely increasing the dosage of anticancer radiation. Amelioration of toxicity following inadvertent radiation exposure may also be mitigated.

ICM A61K IC

8-9 (Radiation Biochemistry) CC Section cross-reference(s): 21

L134 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2005:423713 HCAPLUS Full-text

DOCUMENT NUMBER:

142:459275

TITLE:

SOURCE:

Protection of tissues and cells from cytotoxic effects

of ionizing radiation by abl inhibitors

Reddy, E. Premkumar; Reddy, M. V. INVENTOR(S):

Ramana; Cosenza, Stephen C.; Gumireddy, Kiranmai Temple University of the Commonwealth System

PATENT ASSIGNEE(S): of Higher Education, USA

PCT Int. Appl., 127 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

KIND DATE PATENT NO. APPLICATION NO. \_\_\_\_\_ \_\_\_\_\_\_

```
10/574,993
     WO 2005044181
                          A2
                                20050519
                                            WO 2004-US28658
                                                                   20040902
     WO 2005044181
                          A3
                                20060309
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
             NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
             TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
             EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
             SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
             SN, TD, TG
PRIORITY APPLN. INFO.:
                                            US 2003-501748P
                                                                P 20030909
OTHER SOURCE(S):
                         MARPAT 142:459275
     Entered STN: 19 May 2005
     Pre-treatment with benzyl or styryl sulfonyl compds. protects normal cells
     from the toxic side effects of ionizing radiation. Administration of one or
     more radioprotective compds. to a patient prior to anticancer radiotherapy
     reduces the cytotoxic side effects of the radiation on normal cells. The
     radioprotective effect of the compds. allows for the safe increase of the
     dosage of anticancer radiation. Amelioration of toxicity following
     inadvertent radiation exposure may also be mitigated with administration of
```

IC ICM A61K

ED

AB

8-9 (Radiation Biochemistry) CC Section cross-reference(s): 63

one or more of the compds.

=> d ibib ab hitrn fhitstr 7 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX' - CONTINUE? (Y)/N:y

L134 ANSWER 7 OF 8 USPATFULL on STN

ACCESSION NUMBER:

2006:327543 USPATFULL Full-text

TITLE:

Alpha, beta-unsaturated sulfoxides for treating

proliferative disorders

INVENTOR(S):

Reddy, E. Premkumar, Villanova, PA, UNITED

STATES

Reddy, M. V. Ramana, Upper Darby, PA, UNITED

· STATES

77

Bell, Stanley C., Narberth, PA, UNITED STATES

		· ·	
	NUMBER	KIND DATE	
PATENT INFORMATION: APPLICATION INFO.:	US 2006280746 US 2004-574993 WO 2004-US37293	A1 20061214 A1 20041108 20041108 20060406	(10) PCT 371 date
	NUMBER	DATE	
PRIORITY INFORMATION: DOCUMENT TYPE:	US 2003-520523P Utility	20031114 (60)	

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: DRINKER BIDDLE & REATH, ATTN: INTELLECTUAL PROPERTY GROUP, ONE LOGAN SQUARE, 18TH AND CHERRY STREETS,

PHILADELPHIA, PA, 19103-6996, US

NUMBER OF CLAIMS:

295

EXEMPLARY CLAIM: 1
LINE COUNT: 3952

IT

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB  $\alpha\beta$ -Unsaturated sulfoxides of Formula I: ##STR1## are useful as antiproliferative agents including, for example, anticancer agents, and as radioprotective and chemoprotective agents.

IT 852283-21-7P 852283-22-8P 852283-23-9P 852283-75-1P 852283-91-1P

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

852283-15-9 852283-16-0 852283-17-1 852283-18-2 852283-19-3 852283-20-6 852283-24-0 852283-25-1 852283-26-2 852283-27-3 852283-28-4 852283-29-5 852283-30-8 852283-31-9 852283-32-0 852283-33-1 852283-34-2 852283-35-3 852283-36-4 852283-37-5 852283-38-6 852283-39-7 852283-40-0 852283-41-1 852283-42-2 852283-43-3 852283-44-4 852283-45-5 852283-46-6 852283-47-7 852283-48-8 852283-49-9 852283-50-2 852283-51-3 852283-52-4 852283-53-5 852283-54-6 852283-55-7 852283-56-8 852283-57-9 852283-58-0 852283-59-1 852283-60-4 852283-61-5 852283-62-6 852283-63-7 852283-64-8 852283-65-9 852283-66-0 852283-67-1 852283-68-2 852283-69-3 852283-70-6 852283-71-7 852283-72-8 852283-73-9 852283-74-0 852283-76-2 852283-77-3 852283-78-4 852283-79-5 852283-80-8 852283-81-9 852283-82-0 852283-83-1 852283-84-2 852283-85-3 852283-86-4 852283-87-5 852283-88-6 852283-89-7 852283-90-0 852283-92-2 852283-93-3 852283-94-4 852283-95-5 852283-96-6 852283-97-7 852283-98-8 852283-99-9 852284-00-5 852284-01-6 852284-02-7 852284-03-8 852284-04-9 852284-05-0 852284-06-1 852284-07-2 852284-08-3 852284-09-4 852284-10-7 852284-11-8 852284-12-9 852284-13-0 852284-14-1 852284-15-2 852284-16-3 852284-17-4 852284-18-5 852284-19-6 852284-20-9 852284-21-0 852284-22-1 852284-23-2 852284-24-3 852284-25-4 852284-26-5 852284-27-6 852284-28-7 852284-29-8 852284-30-1 852284-31-2 852284-32-3 852284-33-4 852284-34-5 852284-35-6 852284-36-7 852284-37-8 852284-38-9 852284-39-0 852284-40-3 852284-41-4 852284-42-5 852284-43-6 852284-44-7 852284-45-8 852284-46-9 852284-47-0 852284-48-1 852284-49-2 852284-50-5 852284-51-6 <del>852284-52-7</del> <del>852284-53-8</del> <del>852284-54-9</del> 852284-55-0 852284-56-1 852284-57-2 852284-58-3 852284-59-4 852284-60-7 852284-61-8 852284-62-9 852284-63-0 852284-64-1 852284-65-2 852284-66-3 852284-67-4 852284-68-5 852284-69-6

```
852284-70-9 852284-71-0 852284-72-1
852284-73-2 852284-74-3 852284-75-4
852284-76-5 852284-77-6 852284-78-7
852284-79-8 852284-80-1
                        852284-81-2
852284-82-3 852284-83-4 852284-84-5
852284-85-6 852284-86-7
                        852284-87-8
852284-88-9 852284-89-0
                        852284-90-3
852284-91-4 852284-92-5
                        852284-93-6
852284-94-7 852284-95-8 852284-96-9
852284-97-0 852284-98-1
                        852284-99-2
852285-00-8 852285-01-9 852285-02-0
852285-03-1 852285-04-2
                        852285-05-3
852285-06-4 852285-07-5
                        852285-08-6
852285-09-7 852285-10-0 852285-11-1
852285-12-2 852285-13-3 852285-14-4
852285-15-5 852285-16-6 852285-17-7
852285-18-8 852285-19-9 852285-20-2
852285-21-3 852285-22-4
                        852285-23-5
852285-24-6 852285-25-7
                        852285-26-8
852285-27-9 852285-28-0
                        852285-29-1
852285-30-4 852285-31-5
                        852285-32-6
852285-33-7 852285-34-8 852285-35-9
852285-36-0 852285-37-1 852285-38-2
852285-39-3 852285-40-6 852285-41-7
852285-42-8 852285-43-9
                        852285-44-0
852285-45-1 852285-46-2
                        852285-47-3
852285-48-4 852285-49-5
                        852285-50-8
852285-51-9 852285-52-0 852285-53-1
852285-54-2
```

 $(\alpha,\beta\text{-unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)$ 

IT 852285-55-3 852285-56-4 852285-57-5

 852285-58-6
 852285-59-7
 852285-60-0

 852285-61-1
 852285-62-2
 852285-63-3

 852285-64-4
 852285-65-5
 852285-66-6

 852285-67-7
 852285-68-8
 852285-69-9

 852285-70-2
 852285-71-3
 852285-72-4

 852285-73-5
 852285-74-6
 852285-75-7

 852285-76-8
 852285-77-9
 852285-80-4

 $(\alpha,\beta\text{-unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)$ 

#### IT 852283-21-7P

 $(\alpha, \beta$ -unsatd. sulfoxides for treatment of proliferative disorders and as radioprotectants and chemoprotectants)

RN 852283-21-7 USPATFULL

CN Benzenamine, 2-methoxy-5-[[[(1E)-2-(2,4,6-trimethoxyphenyl)ethenyl]sulfiny 1]methyl]- (9CI) (CA INDEX NAME)

=> d iall abeq tech abex hitstr 8 YOU HAVE REQUESTED DATA FROM FILE 'HCAPLUS, USPATFULL, WPIX' - CONTINUE? (Y) / N: y

L134 ANSWER 8 OF 8 WPIX COPYRIGHT 2007

THE THOMSON CORP on STN

ACCESSION NUMBER: 2006-212802 [22]

WPIX

DOC. NO. CPI:

C2006-070118 [22]

TITLE:

Treatment of an individual for a proliferative disorder

involves administration of alpha, beta-

unsaturated sulfones, sulfoxides,

sulfonamides, sulfinimides, acylsulfonamides and

acylsulfinamide compounds

DERWENT CLASS:

B05

INVENTOR:

REDDY P E; REDDY R M V (UTEM-C) UNIV TEMPLE

PATENT ASSIGNEE: COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO

KIND DATE

WEEK

LA PG 

WO 2006025924 A2 20060309 (200622)\* EN 87[0]

APPLICATION DETAILS:

PATENT NO KIND

APPLICATION DATE

WO 2006025924 A2

WO 2005-US22394 20050623

PRIORITY APPLN. INFO: US 2004-583009P

20040624

INT. PATENT CLASSIF.:

IPC ORIGINAL:

A61K0031-18 [I,A]; A61K0031-18 [I,C]; A61K0031-4427 [I,C]

; A61K0031-4439 [I,A]

BASIC ABSTRACT:

WO 2006025924 A2 UPAB: 20060331

NOVELTY - Treatment of an individual for a proliferative disorder involves administration of alpha, beta-unsaturated sulfones, sulfoxides, sulfonamides, sulfinimides, acylsulfonamides and acylsulfinamide compounds or their salts.

DETAILED DESCRIPTION - Treatment of a proliferative disorder involves administration of alpha, beta-unsaturated sulfones, sulfoxides, sulfonamides, sulfinimides, acylsulfonamides and acylsulfinamide compounds of formula (I), or their salts.

(R1) n-Q1-E1-M1-L(R2)-M2-E2-Q2-(R1) n (I)

Q1 and Q2 = (hetero)aryl;

R1 = halo, 1-8C hydrocarbyl, -C(O)-Ry, -N(Rw)2, -N(Rw)C(O)-Ry, -N(Rw)C(Rz)C(O)-Ry, -N(Rw)SO2Ry, -N(Rw)-1-4C alkylene-CO2Rw, -NO2, -CN, -ORw, -Rw, -RwOC(0)Ry, -OC(Rz)C(0)Ry, -OSO2Ry, -O-1-4C alkylene-CO2Rw, -OP(0)(ORw)2, -O-2-6C alkylene-N(CH3)2, -O-1-6C haloalkyl, -P(O)(ORw)2, -SO2N(Rw)Rx, -NHC(=NH)NHRx, 1-6C haloalkyl or heteroalkyl;

Rw = H or 1-8C hydrocarbyl;

Rx = H, 1-8C hydrocarbyl or -C(O)(1-8C)hydrocarbyl;

Ry = H, 1-8C hydrocarbyl, -O-1-8C hydrocarbyl, substituted phenyl, substituted heterocyclyl(1-3C alkyl), heteroaryl(1-3C alkyl), 2-10C heteroalkyl, 1-6C haloalkyl, -C(Rz)NHRx, -N(Rw)Rx, -1-3C alkylene-NH2, -1-3C alkylene-N(CH3)2, -1-3C perfluoroalkylene-N(CH3)2, -1-3C alkylene-N+(1-3C)3, -1-3C alkylene-N+(CH2CH2OH)3, -1-3C alkylene-ORx, -1-4C alkylene-CO2Rw, -1-4C alkylene-CO2N(Rw)Rx, -1-4C alkylene-C(O)halo, halo(1-3C)alkyl or -1-4C perfluoroalkylene-CO2Rw;

Rz = H, 1-6C alkyl, -(CH2)3-NH-C(NH2)(=NH), -CH2C(=O)NH2, -CH2COOH, -CH2SH, -(CH2)2C(O)-NH2, -(CH2)2CO2H, -CH2-(2-imidazolyl), -(CH2)4-NH2, -(CH2)2-S-CH3, phenyl, -CH2-phenyl, -CH2-OH, -CH(OH)-CH3, -CH2-(3-indolyl) or -CH2-(4-hydroxyphenyl);

n = 0-5;

M1 and M2=-SO2-, -S(O)- or -C(O)-;

L = CH or N;

R2 = H or 1-6C alkyl;

E1 and E2 = carbon-carbon double bond in the (E) - or (Z) -conformation. Provided that:

- (1) when one of M1 and M2 is -SO2-, then the other of M1 and M2 is other than -S(=0)-;
- (2) when one of M1 and M2 is -C(=0)-, then the other of M1 and M2 is other than -C(=0)-; and
- (3) when one of E1 and E2 is carbon-carbon double bond in the (Z)-conformation, then the other of E1 and E2 is carbon-carbon double bond in the (E)-conformation.

INDEPENDENT CLAIMS are also included for the following:

- (1) new compounds (I), or their salts, with the additional proviso that when L is CH, R2 is -H, M1, M2 are -SO2-, and Q1 and Q2 are phenyl; then at least one n is greater than 0, and at least one substituent of R1 is other than -OH, -OC(=O) CH3, -C(O) CH3, -OCH3, -Br, -I, -NO2, -CO2(1-8C) hydrocarbyl, -SO3(1-8C) hydrocarbyl, -P(O) (ORw)2 or -OP(O) (ORw)2; and
  - (2) the preparation of (I).

ACTIVITY - Cytostatic; Neuroprotective; Antiarteriosclerotic; Vulnerary; Osteopathic; Antiinflammatory; Vasotropic; Ophthalmological; Antiangiogenic; Nootropic; Antidiabetic; Gastrointestinal-Gen.; Antiulcer; Gynecological.

MECHANISM OF ACTION - Vascular endothelial growth factor receptor (VGEFR) (preferably VEGFR-1 (FLT-1) and VEGFR-2 (Flk-1/KDR)) inhibitor; Tumor cell growth inhibitor.

The inhibition of FLT1 by 4-((1E)-2-(((E)-4-hydroxy-2,6-dimethoxystyrylsulfonyl)methylsulfonyl)-vinyl)-3,5-dimethoxyphenol (A1) was assessed by employing an in vitro filter assay for FLT-1. (A1) Was prepared as 10 mmol stock solution in dimethylsulfoxide. Curcumin was also prepared as 10 mmol stock solution for testing in the FLT-1 assay. Five units of recombinant FLT1 active protein was incubated with (A1) in reaction mixture (15 mul) (4-(2-hydroxyethyl)-1-piperazine ethanesulfonic acid (HEPES) (50 mM), MgCl2 (10 mM), EDTA (1 mM), dithiothreitol (2 mM) 0.01% NP-40 pH 7.5) for 30 minutes at room temperature (25degreesC). Kinase reactions were performed for 20 minutes at 30degreesC in a volume of 20 mul (enzyme (15 mul)+(A1) (2 muM), ATP (1 mM), gamma32pATP (2 mul) and IGF-1Rtide (250 microns)). Aliquots (10 mul) of the kinase reaction were spotted onto the center of filer. After 30 seconds, the filters were washed with 0.75% phosphoric acid and once with acetone (5 minutes). The IC50 value of (A1) was found to be 0.077 muM.

USE - Compounds (I) are used for the treatment of a proliferative disorder e.g. hemangiomatosis in newborn, secondary progressive multiple sclerosis, atherosclerosis, chronic progressive myelodegenerative disease, neurofibromatosis, ganglioneuromatosis, keloid formation, Paget's disease of the bone, fibrocystic disease of the breast, uterine fibroids, peronies and Duputren's fibrosis, restenosis, benign proliferative breast disease, benign prostatic hyperplasia, X-linked lymphoproliferative disorder, post-transplantation lymphoproliferative disorder, macular degeneration, retinopathies, proliferative vitreoretinopathy, non-cancerous lymphoproliferative disorders and cancer (such as ovarian, cervical, breast, prostate, testicular, lung, renal, colorectal, skin, brain, leukemia

(including acute myeloid leukemia, chronic myeloid leukemia, acute lymphoid leukemia and chronic lymphoid leukemia)); for angiogenesis mediated disorder; and for age related senile dementia.

Compounds (I) are also used for inducing apoptosis of tumor cell (e.g. ovarian, cervical, breast, prostate, testicular, lung, renal, colorectal, skin or brain tumor cells) (all claimed). (I) are further used for treating metastasis, corneal graft rejection, ocular neovascularization, retinal neovascularization, diabetic retinopathy, retrolental fibroplasias, neovascular glaucoma, gastric ulcer, infantile hemangiomas, angiofibroma of the nasopharynx, avascular necrosis of bone and endometriosis.

ADVANTAGE - The compounds selectively kill various tumor cell types without killing normal cells; and activate the c-Jun NH2 terminal kinase (JNK) pathway.

MANUAL CODE:

CPI: B05-B01E; B05-B01F; B05-B01M; B05-B01N; B06-H; B07-H; B10-A08; B10-A09B; B10-A10; B10-A15; B10-A17; B10-A24; B10-A25; B14-E08; B14-F01G; B14-F02F2; B14-F07; B14-G02C; B14-H01; B14-H01A; B14-H01B; B14-H04; B14-H05; B14-J01A4; B14-L06; B14-N01; B14-N03; B14-N14; B14-N17B; B14-S01; B14-S16

TECH

ORGANIC CHEMISTRY - Preparation (claimed): Preparation of (I) involves: (1) either process (A): reacting a compound of formula (R1)n-Q1-C(0)-H (Ia) with a compound of formula RO-C(0)-CH2-M1-L(R2)-M2-CH2-C(0)-OR (Ib); and isolating (I) (where E1 and E2 is carbon-carbon double bonds having (E)-conformation; Q1 is same as Q2; and R1 substituents on Q1 are same as R1 substituents on Q2); or

(2) process (B): reacting a compound of formula (R1)n-Q2-C(O)-H (Ic) with a compound of formula (R1)n-Q1-E1-M1-L(R2)-M2-CH2-C(O)-OR (Id); and isolating (I) (where E2 is carbon-carbon double bonds having (E)-conformation).

R = H or 1-7C hydrocarbyl.

ABEX DEFINITIONS - Preferred Definitions: - Q1, Q2 = phenyl or heteroaryl; - L = CH; - M1 = -SO2-; - M2 = -SO2- or -C(0)-; and - R2 = -H.

ADMINISTRATION - The dosage of (I) is 0.05-50 mg/kg/day and administered parenterally (including intravenously, intramuscularly, intraarterially, intraperitoneally, intranasally, rectally, intravaginally, intravesically, intradermally, topically or subcutaneously) or orally.

SPECIFIC COMPOUNDS - 316 Compounds are specifically claimed as (I), e.g. 4-((1E)-2-(((E)-4-hydroxy-2,6-dimethoxystyrylsulfonyl)methylsulfonyl)-vinyl)-3,5-dimethoxyphenol of formula (I-A).

EXAMPLE - To a round bottom flask containing 2,2'-

(methylenedithio)diacetic acid (0.1 mol) dissolved in glacial acetic acid (25 ml) was added hydrogen peroxide (0.2 mol, 30% solution). The resulting mixture was heated at reflux temperature for 2 hours. When the reaction was complete, the mixture was allowed to cool room temperature (22-25degreesC). Volatiles were removed under vacuum and the rest residue

was purified by column chromatography to obtain carboxymethanesulfonylmethanesulfonyl acetic acid (al). - A solution of 4-hydroxy-2,6-dimethoxybenzaldehyde (2 mmol) and (al) (1 mmol) was dissolved in (40-50degreesC) acetic acid (10 ml) and three drops of piperidine was added. The resulting mixture was heated to obtain 4-((1E)-2-(((E)-4-hydroxy-2,6-dimethoxystyrylsulfonyl)methylsulfonyl)-

vinyl)-3,5-dimethoxyphenol (yield 62%).

=> fil hcap FILE 'HCAPLUS' ENTERED AT 09:23:19 ON 13 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Apr 2007 VOL 146 ISS 17 FILE LAST UPDATED: 12 Apr 2007 (20070412/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11 not 183 L135 0 L1 NOT, L83

=> d que nos L11 SEA FILE=HCAPLUS ABB=ON PLU=ON US2006-574993/APPS L6 STR L7 STR L9 547 SEA FILE=REGISTRY SSS FUL L7 L12 339 SEA FILE=REGISTRY SUB=L9 SSS FUL L6 L32 QUE ABB=ON PLU=ON REDDY, E?/AU L33 QUE ABB=ON PLU=ON REDDY, P?/AU L34 QUE ABB=ON PLU=ON REDDY, M?/AU QUE ABB=ON PLU=ON REDDY, R?/AU L35 L36 QUE ABB=ON PLU=ON BELL, S?/AU L37 QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W) NOVA) )/CS,SO,PA L39 QUE ABB=ON PLU=ON PROLIFER? QUE ABB=ON PLU=ON DISEAS? OR DISORDER? OR SYNDROM? OR L40 MALADY OR SICKNESS OR ILLNESS OR CONDITION L41 QUE ABB=ON PLU=ON HEMANGIOMAT? QUE ABB=ON PLU=ON MULTIPLE (W) SCLERO? L42 L43 QUE ABB=ON PLU=ON MS L44 QUE ABB=ON PLU=ON MYELODEGENER? L45 QUE ABB=ON PLU=ON ?DEGENER? (3A) ?MYELO? L46 QUE ABB=ON PLU=ON GANGLIONEUROMATO? QUE ABB=ON PLU=ON KELOID? L47 QUE ABB=ON PLU=ON PAGET? L48 QUE ABB=ON PLU=ON FIBROCYS? L49 L50 QUE ABB=ON PLU=ON COLORECT? L51 QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER? L52 QUE ABB=ON PLU=ON BRAIN? L53 QUE ABB=ON PLU=ON LEUKEM? OR LEUKAEM? QUE ABB=ON PLU=ON IONIZ? OR IONIS? L54

	•
L55	QUE ABB=ON PLU=ON RADIATION
L56	QUE ABB=ON PLU=ON OPTIC?
L57	QUE ABB=ON PLU=ON ISOMER?
L58	QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?
L59	QUE ABB=ON PLU=ON SARCOID?
L60	QUE ABB=ON PLU=ON PERONIES
L61	QUE ABB=ON PLU=ON DUPUTREN
L62	QUE ABB=ON PLU=ON FIBROSIS
L63	QUE ABB=ON PLU=ON CIRRHO?
L64	QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?
L65	QUE ABB=ON PLU=ON ?VASCULAR?
L66	QUE ABB=ON PLU=ON RESTENO?
L67	QUE ABB=ON PLU=ON ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?S
	ARCOM? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR
	?DYPLAS?
L68	QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISA
	RCOM? OR ANTITUM? OR ANTINEOPLAS?
L69	QUE ABB=ON PLU=ON OVARY OR OVARIAN
L70	QUE ABB=ON PLU=ON BREAST OR MAMMAR?
L71	QUE ABB=ON PLU=ON PROSTAT?
L72	QUE ABB=ON PLU=ON TESTIS OR TESTIC?
L73 ·	QUE ABB=ON PLU=ON LUNG
L74	QUE ABB=ON PLU=ON PULMONAR?
L75	QUE ABB=ON PLU=ON KIDNEY OR RENAL?
L77	15 SEA FILE=HCAPLUS ABB=ON PLU=ON L12
L78	'6 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L39 OR L40 OR L41 OR
	L42 OR L43 OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR
	L51 OR L52 OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR
	L60 OR L61 OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR
	L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75)
L79	QUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
L80 .	QUE ABB=ON PLU=ON MANUFACT?
L81	14 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 AND (L79 OR L80)
L82	15 SEA FILE=HCAPLUS ABB=ON PLU=ON L77 OR L78 OR L81
L83	4 SEA FILE=HCAPLUS ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR
	L35 OR L36 OR L37)
L135	0 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 NOT L83

## => fil wpix

FILE 'WPIX' ENTERED AT 09:23:29 ON 13 APR 2007 COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE LAST UPDATED: 11 APR 2007 <20070411/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200724 <200724/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> New reloaded DWPI Learn File (LWPI) available as well <<<
- >>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<
- >>> New display format FRAGHITSTR available <<< SEE ONLINE NEWS and http://www.stn-international.de/archive/stn online news/fraghitstr ex.pdf
- >>> IPC Reform backfile reclassification has been loaded to 31 December 2006. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training center/patents/stn guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE <a href="http://scientific.thomson.com/support/patents/coverage/latestupdates/">http://scientific.thomson.com/support/patents/coverage/latestupdates/</a>

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE <a href="http://www.stn-international.de/stndatabases/details/ipc reform.html">http://www.stn-international.de/stndatabases/details/ipc reform.html</a> and <a href="http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf">http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf</a>

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX PLEASE SEE

http://www.stn-international.de/stndatabases/details/dwpi r.html <<<
'BIX BIEX ABEX TT' IS DEFAULT SEARCH FIELD FOR 'WPIX' FILE</pre>

=> d que nos	
	1 SEA FILE=WPIX ABB=ON PLU=ON US2006-574993/APPS
L6	STR
L32	QUE ABB=ON PLU=ON REDDY, E?/AU
L33	QUE ABB=ON PLU=ON REDDY, P?/AU
L34	QUE ABB=ON PLU=ON REDDY, M?/AU
L35	QUE ABB=ON PLU=ON REDDY, R?/AU
L36	QUE ABB=ON PLU=ON BELL, S?/AU
L37	QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W)NOVA)
T104 11	)/CS,SO,PA
	2 SEA FILE=WPIX SSS FUL L6
	4 SEA FILE=WPIX ABB=ON PLU=ON L104/DCR
L106	4 SEA FILE=WPIX ABB=ON PLU=ON (RAI110/DCN OR RAI110/DCN OR
	RAI11R/DCN OR RAI11S/DCN OR RAI11T/DCN OR RAI11U/DCN OR
	RAI12A/DCN OR RAI12B/DCN OR RAI12C/DCN OR RAI12D/DCN OR
	RAI12E/DCN OR RAI12F/DCN OR RAI12G/DCN OR RAI12H/DCN OR
	RAI2CA/DCN OR RAI2CB/DCN OR RAI2CC/DCN OR RAI2CD/DCN OR
	RAI2CE/DCN OR RAI2CF/DCN OR RAI2CG/DCN OR RAI2CH/DCN OR
	RAI2CJ/DCN OR RAI2CK/DCN OR RAI2CL/DCN OR RAI2CM/DCN OR RAI2CN/DCN OR RAI2CO/DCN OR RAI2CP/DCN OR RAI2CQ/DCN OR
	RAIZEN/DEN OR RAIZEO/DEN OR RAIZEP/DEN OR RAIZEQ/DEN OR RAIZER/DEN OR RAIZES/DEN OR RAIZET/DEN OR RAIZEU/DEN OR
	RAI2CV/DCN OR RAI2CW/DCN OR RAI2CV/DCN OR RAI2CV/DCN OR
	RAI2CZ/DCN OR RAI2C5/DCN OR RAI2CG/DCN OR RAI2C7/DCN OR
	RAI2C8/DCN OR RAI2C9/DCN OR RAI2C0/DCN OR RAI2C7/DCN OR
	RAI2DC/DCN OR RAI2DD/DCN OR RAI2DE/DCN OR RAI2DF/DCN OR
	RAI2DG/DCN OR RAI2DH/DCN OR RAI2DI/DCN OR RAI2DJ/DCN OR
	RAI2DK/DCN OR RAI2DL/DCN OR RAI2DM/DCN OR RAI2DN/DCN OR
	RAI2DO/DCN OR RAI2DP/DCN OR RAI2DQ/DCN OR RAI2DR/DCN OR
	RAI2DS/DCN OR RAI2DT/DCN OR RAI2DU/DCN OR RAI2DV/DCN OR
	RAI2DX/DCN OR RAI2DY/DCN OR RAI2DZ/DCN OR RAI2DO/DCN OR
	RAI2D1/DCN OR RAI2D2/DCN OR RAI2D3/DCN OR RAI2D4/DCN OR
	RAI2D5/DCN OR RAI2D6/DCN OR RAI2D7/DCN OR RAI2D8/DCN OR
	RAI2D9/DCN OR RAI2EA/DCN OR RAI2E0/DCN OR RAI2E1/DCN OR
	RAI2E2/DCN OR RAI2E3/DCN OR RAI2E4/DCN OR RAI2E5/DCN OR
	RAI2E6/DCN OR RAI2E7/DCN OR RAI2E8/DCN OR RAI2E9/DCN OR
	RAJKMO/DCN OR RAJKMP/DCN OR RAJKN1/DCN OR RAJKN2/DCN OR
	RAJKN3/DCN OR RAJKOB/DCN OR RAJKOC/DCN OR RAJKOD/DCN OR
	RAJKOE/DCN OR RAJKOF/DCN OR RAJKOG/DCN OR RAJKOH/DCN OR
	RAJKOI/DCN OR RAJKOO/DCN OR RANXKV/DCN OR RANXKW/DCN OR
	RANXKX/DCN OR RANXKY/DCN OR RANXKZ/DCN OR RANXLO/DCN OR

#### RANXL1/DCN OR RANXL2/DCN)

L107	4 SEA FILE=WPIX ABB=ON PLU=O	N L105 OR L106
L108	4 SEA FILE=WPIX ABB=ON PLU=O	N L107 AND (L32 OR L33 OR L34 OR
	L35 OR L36 OR L37)	
L136	O SEA FILE=WPIX ABB=ON PLU=O	N L2 NOT L108

### => file stnguide

FILE 'STNGUIDE' ENTERED AT 09:23:42 ON 13 APR 2007
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 6, 2007 (20070406/UP).

=> d his ful

(FILE 'HOME' ENTERED AT 06:44:18 ON 13 APR 2007)

FILE 'HCAPLUS' ENTERED AT 06:44:40 ON 13 APR 2007 ACT NWA993HCAAPP/A

1 SEA ABB=ON PLU=ON US2006-574993/APPS

FILE 'WPIX' ENTERED AT 06:44:50 ON 13 APR 2007 ACT NWA993WPIAPP/A

L2 1 SEA ABB=ON PLU=ON US2006-574993/APPS

FILE 'REGISTRY' ENTERED AT 06:45:00 ON 13 APR 2007 ACT NWA993REGAPP/A

L3 ( 1) SEA ABB=ON PLU=ON US2006-574993/APPS L4 SEL PLU=ON L3 1- RN : 282 TERMS L5 282 SEA ABB=ON PLU=ON L4

-----

FILE 'LREGISTRY' ENTERED AT 06:45:10 ON 13 APR 2007
D SAVED
ACT NWA993STRQ/Q

-----

L6 . STR

L7 STR L6

FILE 'REGISTRY' ENTERED AT 06:47:44 ON 13 APR 2007
L8 2 SEA SSS SAM L7
D SCAN

FILE 'STNGUIDE' ENTERED AT 06:48:01 ON 13 APR 2007 D QUE STAT

FILE 'REGISTRY' ENTERED AT 06:50:46 ON 13 APR 2007 D QUE STAT

L9 547 SEA SSS FUL L7

SAVE TEMP L9 NWA993PSET1/A

L10 18 SEA ABB=ON PLU=ON L5 NOT L9
D SCAN

FILE 'LREGISTRY' ENTERED AT 06:52:13 ON 13 APR 2007
D QUE L6

FILE 'REGISTRY' ENTERED AT 06:52:44 ON 13 APR 2007
L11 18 SEA SUB=L9 SSS SAM L6
D QUE STAT

FILE 'STNGUIDE' ENTERED AT 06:53:16 ON 13 APR 2007

FILE 'REGISTRY' ENTERED AT 06:55:13 ON 13 APR 2007 D QUE STAT

L12 339 SEA SUB=L9 SSS FUL L6 SAVE TEMP L12 NWA993RSET1/A

- FILE 'STNGUIDE' ENTERED AT 06:56:12 ON 13 APR 2007
- FILE 'LREGISTRY' ENTERED AT 07:11:32 ON 13 APR 2007 L13 STR
- FILE 'LREGISTRY' ENTERED AT 07:15:22 ON 13 APR 2007 L15 STR L13
- FILE 'CASREACT' ENTERED AT 07:15:40 ON 13 APR 2007 L16 0 SEA SSS SAM L15 ( 0 REACTIONS)
  - FILE 'STNGUIDE' ENTERED AT 07:15:50 ON 13 APR 2007 D QUE STAT
- FILE 'CASREACT' ENTERED AT 07:18:29 ON 13 APR 2007
  L17 3 SEA SSS FUL L15 ( 8 REACTIONS)
  SAVE TEMP L17 NWA993CRXP/A
  D SCAN
  - FILE 'STNGUIDE' ENTERED AT 07:19:58 ON 13 APR 2007 D SAVED
  - FILE 'CHEMINFORMRX' ENTERED AT 07:20:41 ON 13 APR 2007
- L18 0 SEA SSS SAM L15 ( 0 REACTIONS)
- L19 1 SEA SSS FUL L15 ( 1 REACTIONS)
  SAVE TEMP L19 NWA993CHMP/A
  D SCAN
  - FILE 'STNGUIDE' ENTERED AT 07:22:35 ON 13 APR 2007
- - FILE 'STNGUIDE' ENTERED AT 07:23:41 ON 13 APR 2007
- FILE 'REGISTRY' ENTERED AT 07:24:34 ON 13 APR 2007
- L21 264 SEA ABB=ON PLU=ON L5 AND L12
- L22 18 SEA ABB=ON PLU=ON L5 NOT L12 D SCAN
  - FILE 'STNGUIDE' ENTERED AT 07:25:21 ON 13 APR 2007
- FILE 'LREGISTRY' ENTERED AT 07:26:27 ON 13 APR 2007 L23 STR L15
  - FILE 'STNGUIDE' ENTERED AT 07:27:49 ON 13 APR 2007
    SET NOTICE 110
    D SET
    SET NOTICE 500
  - FILE 'BEILSTEIN' ENTERED AT 07:30:09 ON 13 APR 2007
- L24 1 SEA SSS SAM L7
- L25 0 SEA SSS SAM L6
- L26 11 SEA SSS FUL L6 SAVE TEMP L26 NWA993BEIP/A

```
10/574,993
             6 SEA ABB=ON PLU=ON L26 NOT BABSAN/FA
L27
               SELECT L26 1- BABSAN
     FILE 'BABS' ENTERED AT 07:32:22 ON 13 APR 2007
             8 SEA ABB=ON PLU=ON (6121948/AN OR 6011603/AN OR 5521334/AN OR
L28
                5542760/AN OR 6443896/AN OR 5571926/AN OR 6282045/AN OR
                6294163/AN)
               SAVE TEMP L28 NWA993BABS/A
     FILE 'STNGUIDE' ENTERED AT 07:32:55 ON 13 APR 2007
               D SAVED
     FILE 'CHEMINFORMRX' ENTERED AT 07:33:46 ON 13 APR 2007
L29
             0 SEA SSS SAM L7 ( 0 REACTIONS)
L30
             0 SEA SSS SAM L6 (
                                    0 REACTIONS)
                                5 REACTIONS)
L31
             3 SEA SSS FUL L6 (
               SAVE TEMP L31 NWA993CHMP2/A
               D SCAN
     FILE 'STNGUIDE' ENTERED AT 07:35:49 ON 13 APR 2007
               D SAVED
     FILE 'ZCAPLUS' ENTERED AT 07:53:07 ON 13 APR 2007
L32
               QUE ABB=ON PLU=ON REDDY, E?/AU
L33
               QUE ABB=ON PLU=ON REDDY, P?/AU
L*** DEL
               QUE REDDY, M?
L34
               QUE ABB=ON PLU=ON REDDY, M?/AU
L35
               QUE ABB=ON PLU=ON REDDY, R?/AU
L36
               QUE ABB=ON PLU=ON BELL, S?/AU
L37
               QUE ABB=ON PLU=ON (TEMPLE OR ONCONOVA OR (ONCO(W)NOVA))/CS,SO
               , PA
               D HIS10
L38
               QUE ABB=ON PLU=ON (REDDY OR BELL)/AU
L39
               QUE ABB=ON PLU=ON PROLIFER?
L40
               QUE ABB=ON PLU=ON DISEAS? OR DISORDER? OR SYNDROM? OR MALADY
               OR SICKNESS OR ILLNESS OR CONDITION
L41
               QUE ABB=ON PLU=ON HEMANGIOMAT?
L42
               QUE ABB=ON PLU=ON MULTIPLE (W) SCLERO?
L43
               QUE ABB=ON PLU=ON MS
L44
               QUE ABB=ON PLU=ON MYELODEGENER?
               QUE ABB=ON PLU=ON ?DEGENER? (3A) ?MYELO?
L45
               QUE ABB=ON PLU=ON GANGLIONEUROMATO?
L46
L47
               QUE ABB=ON PLU=ON KELOID?
L48
               QUE ABB=ON PLU=ON PAGET?
L49
               QUE ABB=ON PLU=ON FIBROCYS?
```

QUE ABB=ON PLU=ON ?ATHEROSCLERO? OR ANIATHEROSCLER?

QUE ABB=ON PLU=ON THERAP? OR DRUG OR PHARM? OR MEDIC?

QUE ABB=ON PLU=ON COLORECT?

QUE ABB=ON PLU=ON RADIATION

QUE ABB=ON PLU=ON BRAIN?

QUE ABB=ON PLU=ON OPTIC?

QUE ABB=ON PLU=ON ISOMER?

QUE ABB=ON PLU=ON SARCOID? QUE ABB=ON PLU=ON PERONIES

QUE ABB=ON PLU=ON DUPUTREN

QUE ABB=ON PLU=ON FIBROSIS

QUE ABB=ON PLU=ON CIRRHO?

QUE ABB=ON PLU=ON SKIN OR DERM? OR EPIDER?

QUE ABB=ON PLU=ON LEUKEM? OR LEUKAEM? QUE ABB=ON PLU=ON IONIZ? OR IONIS?

L50

L51

L52 L53

L54 L55

L56

L57

L58

L59

L60 L61

L62

L63

L64

```
L65
                QUE ABB=ON PLU=ON ?VASCULAR?
                QUE ABB=ON PLU=ON RESTENO?
L66
                QUE ABB=ON PLU=ON ?CANCER? OR ?CARCIN? OR ?ONCO? OR ?SARCOM?
L67
                OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLAS? OR ?MALIGN? OR ?DYPLAS?
L68
                QUE ABB=ON PLU=ON ANTICANCER? OR ANTICARCIN? OR ANTISARCOM?
               OR ANTITUM? OR ANTINEOPLAS?
L69
                QUE ABB=ON PLU=ON OVARY OR OVARIAN
L70
               QUE ABB=ON PLU=ON BREAST OR MAMMAR?
L71
               QUE ABB=ON PLU=ON PROSTAT?
L72
                QUE ABB=ON PLU=ON TESTIS OR TESTIC?
L73
                QUE ABB=ON PLU=ON LUNG
L74
                QUE ABB=ON PLU=ON PULMONAR?
L75
                QUE ABB=ON PLU=ON KIDNEY OR RENAL?
     FILE 'HCAPLUS' ENTERED AT 08:04:02 ON 13 APR 2007
L76
           149 SEA ABB=ON PLU=ON L9
L77
            15 SEA ABB=ON PLU=ON L12
              6 SEA ABB=ON PLU=ON L77 AND (L39 OR L40 OR L41 OR L42 OR L43
L78
                OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR L51 OR L52
                OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR L60 OR L61
                OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70
                OR:L71 OR L72 OR L73 OR L74 OR L75)
     FILE 'ZCAPLUS' ENTERED AT 08:05:13 ON 13 APR 2007
L79
                QUE ABB=ON PLU=ON SYNTHES? OR SYNTH OR PREP? OR REACT?
     FILE 'HCAPLUS' ENTERED AT 08:05:53 ON 13 APR 2007
L80
               QUE ABB=ON PLU=ON MANUFACT?
            14 SEA ABB=ON PLU=ON L77 AND (L79 OR L80)
L81
            15 SEA ABB=ON PLU=ON L77 OR L78 OR L81
L82
L83
             4 SEA ABB=ON PLU=ON L82 AND (L32 OR L33 OR L34 OR L35 OR L36
                SAVE TEMP L83 NWA993HCAINV/A
     FILE 'ZCAPLUS' ENTERED AT 08:07:07 ON 13 APR 2007
L84
                QUE ABB=ON PLU=ON AY<2004 OR PY<2004 OR PRY<2004 OR MY<2004
                OR REVIEW/DT
L85
                QUE ABB=ON PLU=ON AY<2004 OR PY<2004 OR PRY<2004
     FILE 'HCAPLUS' ENTERED AT 08:08:08 ON 13 APR 2007
L86
            11 SEA ABB=ON PLU=ON L82 NOT L83
            11 SEA ABB=ON PLU=ON L86 AND L84
L87
            11 SEA ABB=ON PLU=ON L86 OR L87
L88
                D SCAN TI HIT
    FILE 'STNGUIDE' ENTERED AT 08:09:13 ON 13 APR 2007
     FILE 'HCAPLUS' ENTERED AT 08:09:52 ON 13 APR 2007
                SAVE TEMP L88 NWA993HCAM/A
     FILE 'STNGUIDE' ENTERED AT 08:10:15 ON 13 APR 2007
     FILE 'REGISTRY' ENTERED AT 08:10:33 ON 13 APR 2007
L89
               ANALYZE PLU=ON L12 1- LC:
                D 1-7
     FILE 'STNGUIDE' ENTERED AT 08:11:34 ON 13 APR 2007
     FILE 'REGISTRY' ENTERED AT 08:12:36 ON 13 APR 2007
```

264 SEA ABB=ON PLU=ON L12 AND USPATFULL/LC

L90

```
FILE 'USPATFULL' ENTERED AT 08:12:50 ON 13 APR 2007
L91
             1 SEA ABB=ON PLU=ON L90
L92
             1 SEA ABB=ON PLU=ON L91 AND (L32 OR L33 OR L34 OR L35 OR L36
               OR L37)
L93
              0 SEA ABB=ON PLU=ON L91 NOT L92
     FILE 'TOXCENTER' ENTERED AT 08:14:19 ON 13 APR 2007
     FILE 'REGISTRY' ENTERED AT 08:14:21 ON 13 APR 2007
L94
           323 SEA ABB=ON PLU=ON L12 AND TOXCENTER/LC
     FILE 'TOXCENTER' ENTERED AT 08:14:34 ON 13 APR 2007
L95
             3 SEA ABB=ON PLU=ON L94
L96
             3 SEA ABB=ON PLU=ON L95 AND (L32 OR L33 OR L34 OR L35 OR L36
               OR L37)
L97
             O SEA ABB=ON PLU=ON L95 NOT L96
     FILE 'REGISTRY' ENTERED AT 08:15:16 ON 13 APR 2007
            13 SEA ABB=ON PLU=ON. L12 AND CASREACT/LC
T.98
     FILE 'CASREACT' ENTERED AT 08:15:31 ON 13 APR 2007
L99
             6 SEA ABB=ON PLU=ON L98
    FILE 'REGISTRY' ENTERED AT 08:15:50 ON 13 APR 2007
           1 SEA ABB=ON PLU=ON L12 AND CAOLD/LC
L100
    FILE 'CAOLD' ENTERED AT 08:16:01 ON 13 APR 2007
L101
             1 SEA ABB=ON PLU=ON L100
               SELECT L101 1- AN
     FILE 'HCAPLUS' ENTERED AT 08:16:26 ON 13 APR 2007
             2 SEA ABB=ON PLU=ON "CA59:5004B"/OREF
T.102
     FILE 'STNGUIDE' ENTERED AT 08:16:40 ON 13 APR 2007
     FILE 'WPIX' ENTERED AT 08:18:03 ON 13 APR 2007
            12 SEA SSS SAM L6
                D TRI 1-12
                D QUE STAT
L104
           112 SEA SSS FUL L6
                SAVE TEMP L104 NWA993WPIS/A
             4 SEA ABB=ON PLU=ON L104/DCR
L105
               SELECT L104 1- SDCN
L*** DEL
             0 S E10-E121/DNC
             4 SEA ABB=ON PLU=ON (RAI110/DCN OR RAI111Q/DCN OR RAI111R/DCN OR
L106
                RAI11S/DCN OR RAI11T/DCN OR RAI11U/DCN OR RAI12A/DCN OR
                RAI12B/DCN OR RAI12C/DCN OR RAI12D/DCN OR RAI12E/DCN OR
                RAI12F/DCN OR RAI12G/DCN OR RAI12H/DCN OR RAI2CA/DCN OR
                RAI2CB/DCN OR RAI2CC/DCN OR RAI2CD/DCN OR RAI2CE/DCN OR
                RAI2CF/DCN OR RAI2CG/DCN OR RAI2CH/DCN OR RAI2CJ/DCN OR
                RAI2CK/DCN OR RAI2CL/DCN OR RAI2CM/DCN OR RAI2CN/DCN OR
                RAI2CO/DCN OR RAI2CP/DCN OR RAI2CQ/DCN OR RAI2CR/DCN OR
                RAI2CS/DCN OR RAI2CT/DCN OR RAI2CU/DCN OR RAI2CV/DCN OR
                RAI2CW/DCN OR RAI2CX/DCN OR RAI2CY/DCN OR RAI2CZ/DCN OR
                RAI2C5/DCN OR RAI2C6/DCN OR RAI2C7/DCN OR RAI2C8/DCN OR
                RAI2C9/DCN OR RAI2DA/DCN OR RAI2DB/DCN OR RAI2DC/DCN OR
                RAI2DD/DCN OR RAI2DE/DCN OR RAI2DF/DCN OR RAI2DG/DCN OR
                RAI2DH/DCN OR RAI2DI/DCN OR RAI2DJ/DCN OR RAI2DK/DCN OR
```

RAI2DL/DCN OR RAI2DM/DCN OR RAI2DN/DCN OR RAI2DO/DCN OR

```
RAI2DP/DCN OR RAI2DQ/DCN OR RAI2DR/DCN OR RAI2DS/DCN OR
                RAI2DT/DCN OR RAI2DU/DCN OR RAI2DV/DCN OR RAI2DX/DCN OR
                RAI2DY/DCN OR RAI2DZ/DCN OR RAI2D0/DCN OR RAI2D1/DCN OR
                RAI2D2/DCN OR RAI2D3/DCN OR RAI2D4/DCN OR RAI2D5/DCN OR
                RAI2D6/DCN OR RAI2D7/DCN OR RAI2D8/DCN OR RAI2D9/DCN OR
                RAI2EA/DCN OR RAI2E0/DCN OR RAI2E1/DCN OR RAI2E2/DCN OR
                RAI2E3/DCN OR RAI2E4/DCN OR RAI2E5/DCN OR RAI2E6/DCN OR
                RAI2E7/DCN OR RAI2E8/DCN OR RAI2E9/DCN OR RAJKMO/DCN OR
                RAJKMP/DCN OR RAJKN1/DCN OR RAJKN2/DCN OR RAJKN3/DCN OR
                RAJKOB/DCN OR RAJKOC/DCN OR RAJKOD/DCN OR RAJKOE/DCN OR
                RAJKOF/DCN OR RAJKOG/DCN OR RAJKOH/DCN OR RAJKOI/DCN OR
                RAJKOO/DCN OR RANXKV/DCN OR RANXKW/DCN OR RANXKX/DCN OR
               RANXKY/DCN OR RANXKZ/DCN OR RANXL0/DCN OR RANXL1/DCN OR
               RANXL2/DCN)
L107
              4 SEA ABB=ON PLU=ON L105 OR L106
L108
              4 SEA ABB=ON PLU=ON L107 AND (L32 OR L33 OR L34 OR L35 OR L36
               OR L37)
L109
              0 SEA ABB=ON PLU=ON L107 NOT L108
    FILE 'STNGUIDE' ENTERED AT 08:20:54 ON 13 APR 2007
                D COST
     FILE 'LREGISTRY' ENTERED AT 08:22:14 ON 13 APR 2007
L110
               STR L6
     FILE 'MARPAT' ENTERED AT 08:23:53 ON 13 APR 2007
L111
             1 SEA SSS SAM L110
               D SCAN
     FILE 'STNGUIDE' ENTERED AT 08:24:37 ON 13 APR 2007
               D QUE STAT
    FILE 'MARPAT' ENTERED AT 08:27:50 ON 13 APR 2007
               D QUE STAT
               D SCAN
               D QUE STAT
L112
            52 SEA SSS FUL L110
               SAVE TEMP L112 NWA993MARP/A
    FILE 'HCAPLUS' ENTERED AT 08:30:56 ON 13 APR 2007
           52 SEA ABB=ON PLU=ON L112
L113
             6 SEA ABB=ON PLU=ON L113 AND (L32 OR L33 OR L34 OR L35 OR L36
L114
               OR L37)
            46 SEA ABB=ON PLU=ON L113 NOT L114
L115
            34 SEA ABB=ON PLU=ON L115 AND L85
L116
            34 SEA ABB=ON PLU=ON L116 AND ((L39 OR L40 OR L41 OR L42 OR L43
L117
               OR L44 OR L45 OR L46 OR L47 OR L48 OR L49 OR L50 OR L51 OR L52
               OR L53 OR L54 OR L55 OR L56 OR L57 OR L58 OR L59 OR L60 OR L61
               OR L62 OR L63 OR L64 OR L65 OR L66 OR L67 OR L68 OR L69 OR L70
               OR L71 OR L72 OR L73 OR L74 OR L75) OR (L79 OR L80))
L118
             1 SEA ABB=ON PLU=ON L117 AND ATHEROSCLER?/TI
               D IBIB
     FILE 'STNGUIDE' ENTERED AT 08:33:56 ON 13 APR 2007
    FILE 'HCAPLUS' ENTERED AT 08:34:03 ON 13 APR 2007
L119
            34 SEA ABB=ON PLU=ON L117 NOT L88
L120
             2 SEA ABB=ON PLU=ON L114 NOT L83
```

FILE 'STNGUIDE' ENTERED AT 08:35:02 ON 13 APR 2007

FILE 'MEDLINE, BIOSIS, EMBASE, CABA, AGRICOLA, DRUGU, VETU, BIOTECHNO' ENTERED AT 08:35:44 ON 13 APR 2007

FILE 'REGISTRY' ENTERED AT 08:35:50 ON 13 APR 2007

SET SMARTSELECT ON

L121 SEL PLU=ON L12 1- CHEM: 412 TERMS

SET SMARTSELECT OFF

FILE 'MEDLINE, BIOSIS, EMBASE, CABA, AGRICOLA, DRUGU, VETU, BIOTECHNO' ENTERED AT 08:35:55 ON 13 APR 2007

L122 0 SEA ABB=ON PLU=ON L121

FILE 'STNGUIDE' ENTERED AT 08:47:15 ON 13 APR 2007

FILE 'ZCAPLUS' ENTERED AT 08:48:24 ON 13 APR 2007

L123 QUE ABB=ON PLU=ON UNSAT? OR ?ALKENYL?

L124 QUE ABB=ON PLU=ON ?SULFOXID?

FILE 'STNGUIDE' ENTERED AT 08:48:57 ON 13 APR 2007

FILE 'JAPIO' ENTERED AT 08:49:24 ON 13 APR 2007

L125 16 SEA ABB=ON PLU=ON L123(7A)L124

L126 0 SEA ABB=ON PLU=ON L125 AND (L37 OR L38)

FILE 'STNGUIDE' ENTERED AT 08:50:00 ON 13 APR 2007

FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, CABA, AGRICOLA, LIFESCI, BIOENG, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONFSCI, DISSABS' ENTERED AT 08:50:48 ON 13 APR 2007

L127 364 SEA ABB=ON PLU=ON L123 (5A) L124

L128 0 SEA ABB=ON PLU=ON L127 AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37)
D QUE\

FILE 'MEDLINE, BIOSIS, EMBASE, PASCAL, CABA, AGRICOLA, LIFESCI, BIOENG, BIOTECHNO, BIOTECHDS, DRUGU, DRUGB, VETU, VETB, SCISEARCH, CONFSCI, DISSABS, WPIX' ENTERED AT 08:53:12 ON 13 APR 2007

L129 438 SEA ABB=ON PLU=ON L123 (5A) L124

L130 4 SEA ABB=ON PLU=ON L129 AND (L32 OR L33 OR L34 OR L35 OR L36 OR L37)

FILE 'STNGUIDE' ENTERED AT 08:54:31 ON 13 APR 2007

- D SAVED
- D QUE STAT L9
- D QUE STAT L12
- D QUE NOS L89
- D L89 1-7
- D QUE STAT L17
- D QUE STAT L19
- D QUE STAT L29
- D QUE STAT L30
- D QUE STAT L31
- D QUE STAT L26
- D QUE NOS L27
- D QUE L28
- D QUE L88
- D QUE NOS L93
- D QUE NOS L97
- D QUE NOS L99

```
10/574,993
           D OUE NOS L100
           D QUE NOS L102
           D QUE STAT L104
           D QUE NOS L109
           D QUE NOS L122
FILE 'BEILSTEIN' ENTERED AT 09:01:55 ON 13 APR 2007
           D L27 IDE 1
           D L27 RX 1
           D L27 IDE 2
           D L27 RX 2
           D L27 IDE 3
           D L27 RX 3
           D L27 IDE 4
           D L27 RX 4
           D L27 IDE 5
           D L27 RX 5
           D L27 IDE 6
           D L27 RX 6
FILE 'HCAPLUS, CASREACT, CHEMINFORMRX, BABS, REGISTRY' ENTERED AT
09:04:56 ON 13 APR 2007
        21 DUP REM L88 L17 L19 L31 L28 L93 L97 L99 L100 L102... (14 DUPLI
                ANSWERS '1-11' FROM FILE HCAPLUS
                ANSWERS '12-14' FROM FILE CASREACT
                ANSWERS '15-18' FROM FILE CHEMINFORMRX
                ANSWERS '19-20' FROM FILE BABS
                ANSWER '21' FROM FILE REGISTRY
FILE 'STNGUIDE' ENTERED AT 09:05:20 ON 13 APR 2007
FILE 'HCAPLUS, CASREACT, CHEMINFORMRX, BABS, REGISTRY' ENTERED AT
09:06:56 ON 13 APR 2007
       21 DUP REM L88 L17 L19 L31 L28 L93 L97 L99 L100 L102... (14 DUPLI .
                ANSWERS '1-11' FROM FILE HCAPLUS
                ANSWERS '12-14' FROM FILE CASREACT.
                ANSWERS '15-18' FROM FILE CHEMINFORMRX
                ANSWERS '19-20' FROM FILE BABS
                ANSWER '21' FROM FILE REGISTRY
FILE 'STNGUIDE' ENTERED AT 09:07:09 ON 13 APR 2007
           D QUE L100
           D QUE NOS L101
FILE 'HCAPLUS, CASREACT, CHEMINFORMRX, BABS, CAOLD' ENTERED AT 09:09:24
ON 13 APR 2007
        21 DUP REM L88 L17 L19 L31 L28 L93 L97 L99 L101 L102... (14 DUPLI
                ANSWERS · '1-11' FROM FILE HCAPLUS
                ANSWERS '12-14' FROM FILE CASREACT
                ANSWERS '15-18' FROM FILE CHEMINFORMRX
                ANSWERS '19-20' FROM FILE BABS
                ANSWER '21' FROM FILE CAOLD
```

FILE 'STNGUIDE' ENTERED AT 09:09:29 ON 13 APR 2007

L131

L132

L133

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:10:04 ON 13 APR 2007

D IBIB ED AB HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 09:10:11 ON 13 APR 2007.

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:10:23 ON 13 APR 2007

D IBIB ED AB HITIND HITSTR 2-11

FILE 'STNGUIDE' ENTERED AT 09:10:26 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:10:53 ON 13 APR 2007

D IBIB AB FHIT 12

FILE 'STNGUIDE' ENTERED AT 09:10:55 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:11:21 ON 13 APR 2007

D IBIB AB FHIT 13-14

FILE 'STNGUIDE' ENTERED AT 09:11:26 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:11:47 ON 13 APR 2007

D BIB AB FHIT 15

FILE 'STNGUIDE' ENTERED AT 09:11:49 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:11:59 ON 13 APR 2007

D BIB AB FHIT 16-18

FILE 'STNGUIDE' ENTERED AT 09:12:03 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:12:47 ON 13 APR 2007

D IBIB AB 19-20

FILE 'STNGUIDE' ENTERED AT 09:12:48 ON 13 APR 2007

FILE 'CASREACT, CHEMINFORMRX, BABS, HCAPLUS, CAOLD' ENTERED AT 09:13:13 ON 13 APR 2007

D IDE HITSTR 21

FILE 'STNGUIDE' ENTERED AT 09:13:31 ON 13 APR 2007

D QUE STAT L112

D OUE NOS L119

FILE 'HCAPLUS' ENTERED AT 09:14:30 ON 13 APR 2007 D IBIB ED AB HITIND L119

FILE 'STNGUIDE' ENTERED AT 09:14:30 ON 13 APR 2007

FILE 'HCAPLUS' ENTERED AT 09:14:48 ON 13 APR 2007 D IBIB ED AB HITIND L119 2-34

FILE 'STNGUIDE' ENTERED AT 09:15:18 ON 13 APR 2007

D QUE NOS L83

D QUE NOS L92

D QUE NOS L96

D QUE NOS L108

D QUE NOS L126

D QUE NOS L120

D QUE L130

FILE 'HCAPLUS, USPATFULL, TOXCENTER, WPIX' ENTERED AT 09:19:16 ON 13 APR 2007

L134

8 DUP REM L83 L92 L96 L108 L120 L126 L130 (10 DUPLICATES REMOVED)
ANSWERS '1-6' FROM FILE HCAPLUS
ANSWER '7' FROM FILE USPATFULL
ANSWER '8' FROM FILE WPIX

FILE 'STNGUIDE' ENTERED AT 09:19:28 ON 13 APR 2007

FILE 'HCAPLUS, USPATFULL, WPIX' ENTERED AT 09:19:48 ON 13 APR 2007
D IBIB ED AB HITIND HITSTR

FILE 'STNGUIDE' ENTERED AT 09:19:50 ON 13 APR 2007

FILE 'HCAPLUS, USPATFULL, WPIX' ENTERED AT 09:20:17 ON 13 APR 2007 D IBIB ED AB HITIND HITSTR 2-6

FILE 'STNGUIDE' ENTERED AT 09:20:37 ON 13 APR 2007

FILE 'HCAPLUS, USPATFULL, WPIX' ENTERED AT 09:22:16 ON 13 APR 2007 D IBIB AB HITRN FHITSTR 7

FILE 'STNGUIDE' ENTERED AT 09:22:18 ON 13 APR 2007

FILE 'HCAPLUS, USPATFULL, WPIX' ENTERED AT 09:22:51 ON 13 APR 2007
D IALL ABEQ TECH ABEX HITSTR 8

FILE 'STNGUIDE' ENTERED AT 09:22:55 ON 13 APR 2007

FILE 'HCAPLUS' ENTERED AT 09:23:19 ON 13 APR 2007 L135 0 SEA ABB=ON PLU=ON L1 NOT L83 D QUE NOS

FILE 'STNGUIDE' ENTERED AT 09:23:42 ON 13 APR 2007

FILE HOME

FILE HCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Apr 2007 VOL 146 ISS 17 FILE LAST UPDATED: 12 Apr 2007 (20070412/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE WPIX

FILE LAST UPDATED: 11 APR 2007 <20070411/UP>
MOST RECENT THOMSON SCIENTIFIC UPDATE: 200724 <200724/DW>
DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

- >>> New reloaded DWPI Learn File (LWPI) available as well <<<
- >>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<
- >>> New display format FRAGHITSTR available <<< SEE ONLINE NEWS and http://www.stn-international.de/archive/stn online news/fraghitstr ex.pdf
- >>> IPC Reform backfile reclassification has been loaded to 31 December 2006. No update date (UP) has been created for the reclassified documents, but they can be identified by 20060101/UPIC and 20061231/UPIC. <<<

FOR A COPY OF THE DERWENT WORLD PATENTS INDEX STN USER GUIDE, PLEASE VISIT:

http://www.stn-international.de/training center/patents/stn guide.pdf

FOR DETAILS OF THE PATENTS COVERED IN CURRENT UPDATES, SEE <a href="http://scientific.thomson.com/support/patents/coverage/latestupdates/">http://scientific.thomson.com/support/patents/coverage/latestupdates/</a>

PLEASE BE AWARE OF THE NEW IPC REFORM IN 2006, SEE <a href="http://www.stn-international.de/stndatabases/details/ipc reform.html">http://scientific.thomson.com/media/scpdf/ipcrdwpi.pdf</a>

>>> FOR DETAILS ON THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX PLEASE SEE

http://www.stn-international.de/stndatabases/details/dwpi r.html <<<

# FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 12 APR 2007 HIGHEST RN 929960-62-3 DICTIONARY FILE UPDATES: 12 APR 2007 HIGHEST RN 929960-62-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting  ${\tt SmartSELECT}$  searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE LREGISTRY

LREGISTRY IS A STATIC LEARNING FILE

NEW CAS INFORMATION USE POLICIES, ENTER HELP USAGETERMS FOR DETAILS.

FILE STNGUIDE

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Apr 6, 2007 (20070406/UP).

#### FILE CASREACT

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications.

FILE CONTENT:1840 - 7 Apr 2007 VOL 146 ISS 16

New CAS Information Use Policies, enter HELP USAGETERMS for details.

*								
*	CASREACT	now	has	more	than	12	million	reactions
*						:		
****	*****	***	***	****	****	***	*****	*****

Some CASREACT records are derived from the ZIC/VINITI database (1974-1999) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE CHEMINFORMRX

FILE LAST UPDATED: 8 MAR 2007 <20070308/UP>

FILE BEILSTEIN

FILE LAST UPDATED ON JANUARY 10, 2007

FILE COVERS 1771 TO 2006.

#### FILE CONTAINS 9,780,003 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

#### \*\*\*\*\*\*\*\*\*\*\*\*\*

<sup>\*</sup> PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.

<sup>\*</sup> SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE \*

- \* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE
- \* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.
- \* FOR PRICE INFORMATION SEE HELP COST

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

NEW

- \* PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.
- \* NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.

FILE BABS

FILE LAST UPDATED: 10 JAN 2007

<20070110/UP>

FILE COVERS 1980 TO DATE.

FILE ZCAPLUS

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS is strictly prohibited.

FILE COVERS 1907 - 13 Apr 2007 VOL 146 ISS 17 FILE LAST UPDATED: 12 Apr 2007 (20070412/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 12 Apr 2007 (20070412/PD) FILE LAST UPDATED: 12 Apr 2007 (20070412/ED) HIGHEST GRANTED PATENT NUMBER: US7203969 HIGHEST APPLICATION PUBLICATION NUMBER: US2007083964 CA INDEXING IS CURRENT THROUGH 12 Apr 2007 (20070412/UPCA) ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 12 Apr 2007 (20070412/PD) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2006 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2006

FILE TOXCENTER

FILE COVERS 1907 TO 10 Apr 2007 (20070410/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The MEDLINE file segment has been updated with 2007 MeSH terms.and See HELP RLOAD for details.

TOXCENTER thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2007 vocabulary.

FILE CAOLD

FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

FILE MARPAT

FILE CONTENT: 1961-PRESENT VOL 146 ISS 15 (20070406/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1961-1987

MOST RECENT CITATIONS FOR PATENTS FROM MAJOR ISSUING AGENCIES (COVERAGE TO THESE DATES IS NOT COMPLETE):

US 2007043092 22 FEB 2007
DE 102006011317 15 FEB 2007
EP 1754791 21 FEB 2007
JP 2007048464 22 FEB 2007
WO 2007023141 01 MAR 2007
GB 2428675 07 FEB 2007
FR 2889846 23 FEB 2007
RU 2293746 20 FEB 2007
CA 2555098 09 FEB 2007

Expanded G-group definition display now available.

#### FILE MEDLINE

FILE LAST UPDATED: 12 Apr 2007 (20070412/UP). FILE COVERS 1950 TO DATE.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 11 April 2007 (20070411/ED)

#### FILE EMBASE

FILE COVERS 1974 TO 12 Apr 2007 (20070412/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE CABA

FILE COVERS 1973 TO 5 Apr 2007 (20070405/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

The CABA file was reloaded 7 December 2003. Enter HELP RLOAD for details.

FILE AGRICOLA

FILE COVERS 1970 TO 3 Apr 2007 (20070403/ED)

Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted material. All rights reserved. (2007)

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE DRUGU

FILE LAST UPDATED: 10 APR 2007 <20070410/UP>

>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> FILE COVERS 1983 TO DATE <<<

>>> THESAURUS AVAILABLE IN /CT <<<

FILE VETU

FILE LAST UPDATED: 02 JAN 2002 <20020102/UP>

FILE COVERS 1983-2001

FILE BIOTECHNO

FILE LAST UPDATED: 7 JAN 2004 <20040107/UP>

FILE COVERS 1980 TO 2003.

>>> BIOTECHNO IS NO LONGER BEING UPDATED AS OF 2004 <<<

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN /CT AND BASIC INDEX <<<

FILE JAPIO

FILE LAST UPDATED: 2 APR 2007 <20070402/UP>

FILE COVERS APRIL 1973 TO DECEMBER 28, 2006

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE PASCAL

FILE LAST UPDATED: 10 APR 2007 <20070410/UP>

FILE COVERS 1977 TO DATE.

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION IS AVAILABLE IN THE BASIC INDEX (/BI) FIELD <><

FILE LIFESCI

FILE COVERS 1978 TO 21 Mar 2007 (20070321/ED)

FILE BIOENG

FILE LAST UPDATED: 29 MAR 2007 <20070329/UP>

FILE COVERS 1982 TO DATE

>>> SIMULTANEOUS LEFT AND RIGHT TRUNCATION AVAILABLE IN THE BASIC INDEX <<<

FILE BIOTECHDS

FILE LAST UPDATED: 11 APR 2007

<20070411/UP>

FILE COVERS 1982 TO DATE

>>> USE OF THIS FILE IS LIMITED TO BIOTECH SUBSCRIBERS <<<

FILE DRUGB

>>> FILE COVERS 1964 TO 1982 - CLOSED FILE <<<

FILE VETB

FILE LAST UPDATED: 25 SEP 94

<940925/UP>

FILE COVERS 1968-1982

FILE SCISEARCH

FILE COVERS 1974 TO 12 Apr 2007 (20070412/ED)

SCISEARCH has been reloaded, see HELP RLOAD for details.

FILE CONFSCI

FILE COVERS 1973 TO 3 Jan 2007 (20070103/ED)

CSA has resumed updates, see NEWS FILE

FILE DISSABS

FILE COVERS 1861 TO 2 APR 2007 (20070402/ED)

Only fair use as provided by the United States copyright law is permitted. PROQUEST INFORMATION AND LEARNING COMPANY MAKES NO WARRANTY REGARDING THE ACCURACY, COMPLETENESS OR TIMELINESS OF THE LICENSED MATERIALS OR ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SHALL NOT BE LIABLE FOR DAMAGES OF ANY KIND OR LOST PROFITS OR OTHER CLAIMS RELATED TO THE LICENSED MATERIALS OR THEIR USE.

=>